The Urban Institute

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MONITORING INDICATORS OF LAND AND REAL ESTATE REFORM IN RUSSIAN CITIES

Collected Factual and Analytical Reports

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FOREWORD

These published factual and analytical reports represent the outcome of the first year of the project "Monitoring Indicators of Land and Real Estate Reform in Russian Cities," a component of a technical assistance program requested by the government of the Russian Federation. The International Bank for Reconstruction and Development funded this first year of project implementation through Japanese grant PHRD TF 027131. Initial steps on indicator design were funded by the U.S. Agency for International Development and by the Urban Institute.

The primary objective of this project is to promote the development of municipal statistics related to land and real estate in the areas under study.

The major task for the first year was to assist the participant cities in the collection and compilation of data needed both to attract private investors and to expand the revenue base of municipal budgets. A further objective was to use these data to disseminate the results and lessons learned in the course of reform of the land and real estate sectors. Project designers and participants hope that this publication will provide general orientation and help cities sharpen their competitive edge, as well as stimulate other cities to participate in the project in coming years.

The collected data will also be of interest for private businesses, particularly data describing the situation in the secondary real estate market, the availability of land for development, and the status of construction activities.

The project is unique because all six cities were involved in the project on a voluntary basis. The cities themselves collected data after municipal staff received the proper training to perform field work in their cities. The project developers believe this to be a promising sign, demonstrating the cities' willingness to take a proactive position in the search for additional budget revenues and in competition for private investment.

This project is the result of a combined effort of many individuals and institutions. Special acknowledgments should be made to R. Struyk, A. Bertaud, M. Kuraishi, and I. Yuzhanov who supported the project in key organizations that were prospective project sponsors. N. Veligura and L. Freinkman provided key management assistance. We are grateful to the following leaders of field teams: V. Leschenko (Vologda), V. Lokhankov and V. Kondrashov (Ryazan), Y. Meshkova (Samara), A. Sobolev (Pskov), A. Kholopov (St. Petersburg); and O. Shulyak (Taganrog). The professional advice of M. Berezin, O. Matyukhin, and A. Khakhalin was of special importance during data collection in the cities. Indicators were designed and tested with the assistance of S. O'Leary; C. Romanik; and A. Vysokovsky, the Russian director of the project.

Olga Kaganova,

Project Director

This publication is composed of three parts: (1) base data collected in the cities, (2) analytical papers interpreting and reviewing this data, and (3) papers related to the project rollout.

BASE DATA

Base data are tabulated and presented in the appendix. Quantitative indicators are expressed in both relative and specific terms to permit a comparison of the cities' performances. At the same time, all indicators presented in the appendix may be easily converted into absolute terms, as needed.

In the course of implementation, the most serious obstacle to the project was the lack of some information required for the indicators. Russian cities lack fundamental data on their own activities and operations. Therefore, one of the key objectives of this project was to assist cities in compiling and analyzing the most critical information. It was recommended that only feasible and pragmatic approaches be used: collection of only those data that are accessible to municipalities. However, the cities failed to furnish some parts of the requested information. In addition, the gaps of information varied from city to city. This publication aims to reveal to the cities their information gaps; the analytical reports seek to draw attention to the most critical bodies of information that were lacking.

Another obstacle was the poor quality of information. Unfortunately, data can be distorted, or have latent inconsistency, for several reasons: the innate complexity of the process of redistribution and the documentation of land and real estate rights, the continuously changing responsibility for keeping track of real estate rights and the associated documentation within the municipal departments, and the poor condition of municipal statistics in general. The project developers have done their best to make the data collected by all participating cities conform to survey requirements and to reveal and correct any inadequacies in the data. We added special comments where such inadequacies were difficult to resolve and might give rise to an incorrect interpretation of the data supplied. However, the project developers and the authors of this publication can not take responsibility for the reliability of the data provided by the cities.

The indicators for the year 1997 either reflect the situation as of January 1, 1998, or during the entire year.

The charts in the appendix address the following key subject areas:

1. General city characteristics—population, area, budget revenues (table A1).
2. Inventory and privatization of land, residential and nonresidential property, and documentation of rights (tables B1–B4).
3. Secondary land and real estate markets and construction activity (tables B1–B3).
4. Availability of land for development, and developers' costs associated with land acquisition and off-site infrastructure development (tables G1–G5).
5. Municipal revenues from land and real estate (tables D1–D7).

The project developers hope that senior officials and staffs of the land, real estate, and budget departments of the surveyed cities will take the opportunity to examine these charts, while other interested persons can become familiar with data that previously was not generally available.

ANALYTICAL REPORTS

This section consists of three articles that review various aspects of the interpretation and analysis of the collected data. Opinions and conclusions expressed are exclusively the authors' and do not represent the official point of view of The World Bank, the government of the Russian Federation, or the municipalities participating in the project.

The prospective audience for these articles is mainly the senior officials and specialists of city administrations. The article by O. Z. Kaganova may be of interest to the business community as well.

In her article, O. Kaganova summarizes and interprets all major blocks of information collected. Specifically, the article covers the issues of:

- Redistribution and documentation of land and real estate rights;
- Functioning of the secondary land and real estate markets;
- Construction activities, and terms for developers' activities; and
- Land and real estate as sources of municipal budget revenues.

In his article, A. A. Vysokovsky analyzes the structure of municipal revenues derived from land and real estate, major points of difference the cities have in this area, and the prospects for making local real estate more beneficial to the municipalities.

The article by C. Romanik investigates aspects of the relationship between cities' reliability as borrowers and their capacity to be efficient owners and managers of land and real property. Specifically, the author demonstrates how the indicators may be used as tools for assessing cities' creditworthiness.

All articles are illustrated through quantitative indicators taken and interpreted by authors from the project database.

PROJECT ROLLOUT

The articles in this section are mainly designed for prospective sponsors of the project, as well as for those who will coordinate field work during the second year.

N. B. Kosareva and A. V. Khakhalin discussed in their article the significance of the project for Russia's cities and propose specific actions for rolling out the project.

M. P. Berezin, O. V. Matyukhin, and A. V. Khakhalin were involved in the project as consultants, assisting cities in the compilation of the initial data for indicators. In their articles, they formulated recommendations on how to improve the data collection procedures and the indicators. Their recommendations may well prove useful in the second-year activities of the project.

ANALYTICAL REPORTS

WHAT NEW HAVE WE LEARNED THROUGH INDICATORS?

Olga Z. Kaganova

EXECUTIVE SUMMARY

This paper discusses the four key components of the land and real estate reform, based on the data for 1997:

- Redistribution and documentation of land and real estate rights.
- Functioning of the secondary land and real estate markets.
- Construction and developers activity.
- Land and real estate as sources of municipal budget revenues.

FINDINGS

I. Redistribution and Documentation of Land and Real Estate Rights

This area includes a range of procedures: (1) *the physical inventory of property* (physical cadastres), (2) *documentation of property rights,* including privatization, and (3) *registration of these rights*.

I.1 Only three pilot cities—St. Petersburg, Vologda, and Pskov—managed to attain significant progress in the creation of the unified physical cadastres. For them, a unified system of building and land parcel codification is typical. However, none of the cities has succeeded yet in the introduction of a unified system of codification of buildings and premises.

I.2 None of the participating cities had a unified system of rights registration. In general, the Land Committee registered land rights, and residential and nonresidential property was registered by BTI. Registration of new types of rights, for example, mortgages, was specifically indeterminate (in four participating cities, mortgages are registered by two different authorities).

I.3 In none of the cities was it possible to register a building and a land parcel underneath it as a single property unit, even in cases when rights to them are acquired simultaneously (which is a result of the fundamental structural flaw in the underlying legislation).

I.4 The land documentation policy of municipalities varies substantially from city to city. Thus, Taganrog has the highest level of documented land—58 percent of the city's area or 112 parcels per 1,000 city inhabitants. The lowest level of land documentation is found in St. Petersburg—8.5 percent of the city's area or four parcels per 1,000 inhabitants. A low level of documentation results probably from a policy to document rights to a parcel (including registration) only after the parcel is entered in a top-quality physical cadastre. In order to record land in a physical cadastre, a tenant needs to pay for high-accuracy geodesic surveys, which are rather expensive, and many postpone doing it.

I.5 The land privatization policy also has been different across the cities. The share of privately owned land in a city varies from near zero in Pskov and Ryazan to 17.5 percent of the city's area in Taganrog. The two most important trends are the privatization of land by individuals and the privatization of land by legal entities. In Taganrog, individuals own prac-

tically all private land, which creates a potential for the growth of single-family housing and the redistribution of wealth associated with housing.

However, more important for cities' general economic growth is availability of land for acquisition in private ownership by legal entities. St. Petersburg heads the list, as 4.2 percent of its territory is in corporate ownership versus less than 0.5 percent in the remaining cities.

1.6 Housing privatization has been more even geographically than land privatization: privately owned housing in five cities varies from 43 percent to 50 percent of the entire stock; in Taganrog, private housing accounts for 72 percent (due to a 20 percent to 30 percent higher initial level of individually owned housing).

1.7. Data on nonresidential property, both private and public are fragmental. Thus only Ryazan provided consistent information about both types of property. Four cities presented data on private property, and even volume of leased out municipal property was presented by four cities only. However, even these incomplete data indicate that:

- Cities are major property owners with huge portfolios of income-generating (i.e., leased-out) properties numbering in the hundreds, or even thousands of units. The smallest portfolio is in Vologda—(513 active lease agreements) and the largest is in St. Petersburg (about 20,000 current leases)

- The volume of privately owned nonresidential property is tangibly lower than the volume of publicly owned property—at least in those four cities for which the data are available.

II. Functioning of the Secondary Land and Real Estate Markets

Data on the secondary market are incomplete because in 1997 registration of transactions was not yet compulsory.

II.1 Secondary land markets may comprise four major types of transactions: sale transaction between private owners; lease of privately owned land; sale of lease rights to publicly owned land (either municipal or state) by one lessee to another; and sublease of such land. Only two out of these four types were registered in the participating cities: land sales by private owners and subleases of public land.

II.2 Only Samara and Taganrog provided complete data about the secondary land market; Ryazan, Vologda, and Pskov provided partial data. St. Petersburg data were not available.

II.3 Development of the secondary land market is rather different in different cities, and in some cities it is very active, especially sales of privately owned land. Thus, in Samara 8.3 percent of private parcels changed owners during the year, with especially high turnover (12.2 percent) among parcels owned by legal entities. In Taganrog, the overall registered annual turnover was 2.4 percent. The data indicate some dramatic changes in Ryazan since 1996: only two enterprises sold their land in 1997, whereas 130 sites were sold by enterprises during the first half of 1996.

The sublease of public land was many times less active than sales of private land, at least in Samara and Taganrog, where data were available.

II.4 The data on average registered sale prices are available for Samara ($7.73/sq. m.), Vologda ($3.01/sq. m.), and Taganrog ($1.21/sq. m.), and these prices demonstrate a de-

crease depending on the size of a city, which is expected in the market economy. Naturally, average prices of land sold by legal entities ($12.16/sq. m. in Samara and $10.38/sq. m. in Taganrog) are higher than the overall average.

II.5 The secondary housing market was very active in all the cities. The volume of sales and exchanges of the housing stock immediately available for market transactions (i.e., private and cooperative) varied from 5 percent (in Ryazan) to 8.7 percent (in Samara). The same transactions comprised 2.9 percent to 3.7 percent of the overall housing stock. Practically, the turnover is even higher because some transactions registered as gifts were, in fact, hidden sales. In the USA the average annual turnover of existing housing was 3.5 percent during 1990–1995. Therefore, the housing market in the surveyed cities has about the same or an even higher level of activity than in the USA.

II.6 Data available for Ryazan reveal that an average unit sold on the market was smaller than a standard average unit in the city. Specifically, an average sold unit had a total floor area of 39.7 sq. m. or 82 percent of the city's average unit. The same trend may be expected in the other cities.

II.7 Price information on registered housing transactions was not available in all the cities. However, approximate data on local market prices obtained from brokers allow some rough estimates of money turnover in the housing market, which continues to be a cash market. Thus, in Pskov, assuming all housing sold for a minimum market price of $210/sq. m., this turnover is estimated as $17,600,000 or $85 per capita.

II.8 New housing construction was substantially lower than might be expected in conjunction with the level of activity on the market for existing housing. Thus, in the USA new annually completed homes comprised from 33 percent to 37 percent of existing housing sold during 1990–1995, with new homes sold within a year of completion ranging from 22 percent to 24 percent of existing homes sold. In four surveyed cities, new housing completion was substantially lower than in a "balanced" USA case: the new housing comprised 19.4 percent (St. Petersburg) to 28.8 percent (Ryazan) of the housing sold on the secondary market. Only in Vologda was there a high level of new construction—49.3 percent. However, it remains unknown what portion of new construction was targeted for market because the numbers above include public housing programs also.

II.9 Only Ryazan and Samara provided data on secondary transactions of nonresidential real estate. This segment of the secondary market was the most active, with annual turnover of about 40 percent private properties.

III. Construction and Developers Activity

III.1 The number of construction permits issued (per 1,000 inhabitants) varied from 0.1 (Pskov) to 0.47 (Taganrog), and the number of completed projects ranged from 0.08 (St. Petersburg) to 0.66 (Taganrog).

III.2 The value of completed projects is known for three cities: $144 per capita in Vologda, $70 per capita in Taganrog, and $124 per capita in Pskov. From 84 percent to 91 percent of this investment was in housing construction. This is much higher than in the USA, where only 44 percent to 46 percent of investment goes into housing, another 32 percent to 34 percent into non-residential stock, and 22 percent into infrastructure.

The reported total costs of completed projects (including all development costs and profits) were $432/sq. m. in Vologda and Pskov and $328/sq. m. in Taganrog. These data should be treated with care: as a rule, the posted cost of projects is based on officially declared construction cost indices, which may be based on estimated figures. Therefore, it is difficult to say to what extent a declared cost of a completed project reflects actual construction costs incurred by developers. On the other hand, it is also not clear whether these figures include land acquisition and infrastructure fees paid by developers.

If, however, these data are representative, it indicates that new housing is too expensive compared with the existing housing in the market, at least compared with the USA. Thus, in Pskov the average total cost of new construction accounted for 154 percent of the average price for existing housing, while in the USA it comprises only 118 percent.

III.3 The transitional status of the economies of Russian cities, which are a mix of centralized and market-oriented elements, make it nearly impossible to carry out a quantitative analysis of land development indicators. One example is availability of land for developers. A lack of parcels in most popular districts is one of the most frequently named obstacles for successful implementation of construction and renovation projects. However, it is very difficult to measure this deficit because land may be obtained through both old-style procedures and new market channels.

Another example is a development cost that is extremely volatile, especially its land and infrastructure components. Thus, land and infrastructure fees charged from developers may differ by two to four times within one city, irrespective of the market value of the land. These fees generally range from 10 percent to 50 percent of the construction cost and do not depend on the size of a city.

III.4 Among surveyed cities, only St. Petersburg and Pskov made progress in coordinating the total amount of development charges and fees imposed on developers, but only for corporate ones. Charges imposed by utility providers in the other four cities remain mostly ungoverned, as well as charges from individual developers (families) in all six cities.

IV. Land and Real Estate as Sources of Municipal Budget Revenues

IV.1 There are five main sources of municipal revenues related to land and real estate: sale of property and land (mainly privatization); the land tax; the property tax (approximately 50 percent of the property tax paid by companies is derived from real estate); land lease; and lease of commercial property. These revenues comprised from 10.3 percent (Pskov) to 31.5 percent (St. Petersburg) of the total municipal budget. The dominant source in all cities is the property tax (6 percent to 18.1 percent of the budget revenues). Three other sources—the land tax, lease of nonresidential property, and land lease—have approximately equal importance for municipal budgets. Among them, the maximum level (6 percent) of budget revenues from lease of nonresidential property was achieved in St. Petersburg, and the maximum level (5.4 percent) from lease of land was found in Taganrog. The most insignificant source is the sale of property—not more than 0.4 percent of the budget.

IV.2 There are large variations among the cities in collection of taxes and rents. For example, in Samara only 35 percent of the assessed land tax was collected. In Ryazan, only 73.9 percent of the land rent was collected, and in Taganrog, 67.9 percent of the rent for nonresidential stock was collected. Among the five cities that furnished the revenue data, only two managed to exceed the level of 90 percent in collecting rent for nonresidential stock.

Increasing the rent collection for nonresidential stock might be the immediate and politically and socially neutral way to increase the revenues.

IV.3 Surprisingly, rates of land rent are not necessarily higher than land tax rates, despite the fact that municipal authorities have much more control over the land rent than over the land tax. In some cities, the land rent was strikingly low. For example, in Samara, the average annual land rent was less than one cent per one sq. m.

Municipal rent varied in five cities (except St. Petersburg, which did not present this information) from $9/sq. m./year in Ryazan to $18/sq. m./year in Taganrog. This is from 14 to 29 times lower than on the secondary market, if the price estimates for the secondary market provided by local brokers were true. This implies that the market demand allows increasing municipal rent rates. Even a modest increase of these rates might substantially benefit municipal budgets. For instance, the budget revenues of the five cities in 1997 would grow at 3.2 percent to 5.9 percent of the total budget if the cities implemented the following scenario: leased out 5 percent of the stock at the secondary market rate, 10 percent of it at half the market rate, 50 percent at double the municipal rate, and the rest at the current municipal rent rate.

IV.4 Most cities do not have a regular inventory of property allocated in “economic jurisdiction” and “operative management” of various enterprises and revenues derived from it. Available circumstantial data show a high potential of this revenue reserve.

CONCLUSIONS

1. The data collected by the participating cities for 1997 are incomplete to a large extent because the registration of real estate rights and transactions was not compulsory until February 1998. Now that the Law on Registration has taken effect, the outlook for collection of indicators data is much better.

2. Even with some gaps, the information presented by the cities is very indicative concerning land documentation and privatization policies promoted in different cities.

3. In all participating cities, the active part of the economy generates some effective demand for nearly all types of real estate. Creation of a favorable environment and infrastructure for satisfying this demand should become a special concern of municipalities.

4. The housing market in the participating cities has a level of activity equal to or higher than in the USA. Given the fact that the Russian housing market primarily uses cash rather than borrowed capital, the high rate of transactions is impressive and calls for additional research and macroeconomic analysis. The high housing market activity is, first and foremost, evidence of the powerful redistribution processes at work within Russia. Because of privatization, housing has become the key component of the wealth widely available for residents regardless of their current incomes. That is why differentiation in the population by income is accompanied by respective redistribution of housing through the housing market.

5. In most cities, the demand for new housing remains unsatisfied. The unsatisfactory rate of new speculative construction may be explained by four factors: (1) difficulties in acquiring land for development in districts most popular with final buyers of housing; (2) the high cost of construction, which makes new housing, especially of ordinary quality, not competitive with much cheaper existing (secondary) units; (3) the unavailablity of construc-

tion loans; and (4) the insufficient experience of private developers in marketing and realizing potential niches in the housing market.

6. In all participating cities, the share of investment in infrastructure and commercial development is substantially lower than is the case in the USA. In order to achieve better results in this area, it is necessary, first of all, to develop viable instruments of long-term infrastructure financing (both for the private and public sectors). Later on, when the overall economic conditions improve, the private sector will provide investment in new nonresidential construction.

7. Land and real estate have already become significant sources of municipal budget revenues. However, municipal surplus real property may be the most underutilized municipal asset. There are two strategic directions for increasing revenues and improving their structure:

- Extension of the independent municipal tax base. For attaining results in this area, some amendments should be introduced into at least the subfederal legislation.

- More efficient use of existing revenue sources. This objective may be fulfilled primarily at the municipal level and requires improving municipal real property asset management.

8. Potentially, objectives of specific land and real estate reform policies and actions may come into conflict with each other or may appear to be incompatible; for example, a decision to privatize nonresidential property may contradict a city's policy of leasing it out in order to replenish its budget. To address such situations, municipalities should carefully evaluate suggested programs within the framework of a cost-benefit analysis. Some technical assistance in this area of overlapping municipal finance reform and real estate reform might be useful.

9. The indicators may provide a good background for formulating qualitative and quantitative eligibility criteria concerning the local progress of real estate reform for including cities in programs supported by international donors.

WHAT NEW HAVE WE LEARNED THROUGH INDICATORS?

This paper discusses the four key components of the land and real estate reform, based on the indicator analysis:

- Reassignment and documentation of land and real estate rights that imply a variety of associated procedures (inventory of property, rights documentation and registration, rights privatization, etc.);
- Functioning of the secondary land and real estate markets;
- Construction and developers' activity; and
- Land and real estate as sources of municipal budget revenues.

REASSIGNMENT AND DOCUMENTATION OF RIGHTS

This area includes a range of procedures, many of which are concurrent and not always consistent. The most fundamental are: (1) *the physical inventory of property* (physical cadastres); (2) *documentation of property rights,* including privatization; and (3) *registration of these rights*.

The onset of reforms was characterized by the absence of a unified inventory of land and nonresidential property. Bureaus of technical inventory (BTIs) were only responsible for the inventory of residential and civil nonresidential property. The need for physical cadastres grew simultaneously with the necessity to document both the rights of actual users and the new rights that arose as a result of land and real estate privatization.

Privatization of land and real estate is a manifold process. It includes the privatization of housing, land held by individuals, land under privatized enterprises, nonresidential property (as a part of small-scale and large-scale privatization of enterprises), and the lease of state-owned lands and municipal nonresidential property (because a lease may also be treated as a specific form of privatization of property rights). All these processes result from the enactment of various legislative and regulative acts recently adopted by federal and subfederal authorities. In view of the contradictory nature of the current legislation, and of large variations in local privatization policy, privatization outcomes vary substantially among cities.

Documentation and registration of rights have been two different and not necessarily concurrent processes. Until enactment in 1998 of the Law on Registration of Real Estate Rights and Transactions, either many rights were not subject to registration, or such registration was irregular. For example, complete data on the amount of nonresidential property in private ownership is not available. Moreover, localities may pursue quite different registration policies and, consequently, produce quite different quantitative results (discussed below).

Table 1-1 illlustrates the organizational status of property rights registration before enactment of the Law on Registration, and the progress in creating the unified physical cadastres. Table 1-1 points to some quite obvious general conclusions:

(1) None of the participating cities had a unified system of rights registration. In general, the city land committee, or its agency, registered land rights, and residential and nonresidential property was registered by the BTI. Registration of new types of rights, such as mortgages, was specifically indeterminate. (In four participating cities, mortgages are registered by two different authorities.) The fundamental structural flaw of the current registration

system (or, more precisely, of the underlying law) is that it is imposible to register a building and a land parcel underneath it as a single property unit, even in cases when rights to them are acquired simultaneously.[1]

(2) Only three pilot cities managed to attain significant progress in the creation of the unified physical registers. For them, a unified system of building and land parcel codification is typical. However, none of the cities has yet succeeded in the introduction of a unified system of codification for buildings and premises.

Let us now turn to the analysis of the procedures for documentation and privatization of land rights, as well as the rights of housing and nonresidential properties. Some data on these three types of real estate are presented in tables 1-2, 1-4, and 1-5, respectively.

LAND

Table 1-2 illustrates the difference in localities' policy of documentation and privatization of land rights.

First, it is evident that, by volume of documented land, the cities may be broken down into two groups. One group, including Samara, Vologda, and Taganrog, has a high level of documented municipal area—from 38 percent up to 58 percent. The number of documented land parcels are also relatively high: 83–112 parcels per 1,000 city inhabitants. The other group includes St. Petersburg and Ryazan. They have no more than 8.5 percent and 14 percent of documented area, respectively, and the number of documented parcels does not exceed the level of 4 to 6 parcels per 1,000 city inhabitants. Pskov is between those two groups: 20 percent of its territory, or 44 parcels per 1,000 city inhabitants, is documented.

We presume that the low level of documented land in St. Petersburg and Ryazan is the result of the documentation policy pursued by these cities. Only land parcels entered in a top-quality physical register were subject to documentation (i.e., registration of rights-establishing documents). In order to record land in a physical register, a tenant must pay for high-accuracy geodesic surveys, which are rather expensive. Hence, the involvement of land in market turnover has been critically slowed because of the requirement for the precise recording of physical features of sites. However, this does not prevent a city administration from collecting land tax from tenants whose land rights are not documented. Thus, in St. Petersburg the number of real property taxpayers is 20,000 more than the number of documented parcels. In Ryazan this difference is approximately 16,000.

Second, table 1-2 shows the municipal policy of land privatization. The two most important trends in this policy are the privatization of land by individuals and the privatization of land by legal entities. The share of privately owned area in a city varies from near zero in Pskov and Ryazan to 17.5 percent in Taganrog. However, private ownership of land involves two components, which differ in importance for future city development. Individual ownership of land is important for the construction of single-family homes, as well as for the intensified redistribution of wealth in the society. From this point of view, the situation in Taganrog is most advanced, as nearly all private land in the city is in individual ownership. With a high percentage of existing residential properties in Taganrog being single-family homes (see table 1-4), it is safe to assume that the city has good prospects for further expansion in construction of this type of housing.

[1] One more serious deficiency of the current legislation is that rights to an undeveloped land parcel do not imply rights to future buildings on it. Currently such rights must be registered in a separate manner that is considered disruptive for the further development of construction mortgage lending.

The process of land privatization by individuals must be examined with proper allowance for the proportion of land in private ownership with inheritable life tenure. The latter term means for land tenants substantial limitation of their rights relative to private ownership, since inheritable life tenure cannot be sold or mortgaged. Therefore, the high percentage of land in inheritable life tenure versus privately owned land suggests a conservative approach by the municipality to the development of land market opportunities, even for individuals. Specifically, the data available indicate that Pskov and Samara are rather inflexible in developing land market opportunities, whereas in Taganrog, St. Petersburg, and Ryazan, policy appears to be more market-oriented.

Furthermore, the inflow of private investments into their economies (industry, service sector, etc.) is of great importance for cities' general economic prosperity. Availability of land for acquisition in private ownership by legal entities serves as the key factor for making a city more attractive for investments. In this context, St. Petersburg heads the list, as 4.2 percent of its territory is in corporate ownership versus less than 0.5 percent in the remaining cities. Long-term lease of land might serve as one more form of long-term land rights for prospective investors (though much evidence points to only minor attractiveness of currently used standard lease agreements for major investors). However, even this form of land rights privatization is scarcely used by municipalities: The maximum city area conveyed in long-term leases accounts for a mere 1.9 percent (in Ryazan).

One more form of land use known as "permanent or perpetual use" is actually inherited from the prereform legislation and appears to be the least appropriate for private investors. It is highly probable that the high percentage of this form in the total volume of documented land in Samara, Taganrog, and Pskov is indicative of municipalities' and land tenants' inclination to the status quo documentation of their rights rather than toward encouragement of truly market-driven land relations.

Finally, it is noteworthy that, in the five cities on which full data are available, short- and mid-term leases substantially predominated over long-term leases.

Table 1-3 summarizes our conclusions on rights documentation and privatization policies employed by participating cities.

HOUSING

Table 1-4 provides the base data on residential property in the participating cities. In the inventory part of the table, the data on the volume of single-family and town houses are shown on a separate line, so as to have a starting point for further monitoring of this subsector, given the high likelihood of rapid growth of this type of housing in the majority of cities.

Analysis of the ownership structure suggests that privatization of housing in various cities has been more even compared with land privatization. In all five cities the variation in the total percentage of municipal, state, and mixed-ownership housing lies within the range of 50 percent to 57 percent. However, in Taganrog this category accounts for only 28 percent because of a 20 percent–30 percent higher initial level of individual housing.

Unfortunately, municipal data sources do not provide current statistics on such fundamental indicators as distribution of housing by ownership type. As table 1-4 shows, the cities

persist in indicating the starting volume of cooperative housing, without regard to cooperative units where a loan was paid off and they were converted to private ownership.[2]

NONRESIDENTIAL PROPERTY

Table 1-5 demonstrates the limited availability of data on nonresidential property, compared with information on land or housing. This is the case especially with Vologda and Pskov, which failed to furnish the data on privately owned nonresidential property. Taganrog delivered tentative information about this category. St. Petersburg is lacking data on nonresidential property leased out by the city.[3] As mentioned above, the scarcity of information on nonresidential property is based on historical factors.

However, even after the enactment of the Law On Registration of Real Estate Rights and Transactions, there are still many problems regarding *documentation of municipal and state nonresidential property* that require clarification. Shall the rights to municipal and state property located on city territory be subject to compulsory and regular registration? Who shall perform it? Moreover, who will bear the cost? As long as these questions remain open, it is hardly possible to expect that cities will have at their disposal regular and full information on public nonresidential property located within their boundaries.

Nevertheless, even with incomplete data on nonresidential property, it is possible to conclude that all five cities are major property owners with huge portfolios of income-generating (i.e., leased out) properties numbering in the hundreds, or even thousands, of units. The smallest portfolio is in Vologda—513 active lease agreements. In addition, hundreds, or even thousands, of property units are transferred in full economic jurisdiction, or operative management. In view of such a great volume of property owned by municipalities, it is necessary to determine whether they are capable of managing it cost-effectively. We will try to answer this question in the section dealing with municipal land and property revenues.

Lastly, table 1-5 shows that the volume of privately owned nonresidential property is tangibly lower than the volume of publicly owned property, at least in those four cities on which data are available.

SECONDARY LAND AND REAL ESTATE MARKETS AND RESIDENTIAL CONSTRUCTION

In Russia, real estate transactions between private parties are traditionally called "secondary." This means that the secondary market does not involve transactions of privatization, sale, or lease of property from a district, city, region, or the federal government.

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[2] With confidence we may say that only about St. Petersburg, where the total volume of housing initially constructed by cooperatives, as of 1/1/98 was 17.4 percent. To date only about 10 percent of this initial volume is still in cooperative ownership, whereas the major part of it was converted into private ownership. We suggest that data on the other cities shown in table 1-3 also account for the starting level rather than the present one.

[3] In fact, mass media publications repeatedly stated that the municipality had signed nearly 20,000 nonresidential property lease agreements. According to official data, as of 1/1/97 the city leased out 5,182,000 sq. m. of its nonresidential property. Absence of those data in the information furnished for this project may have two causes: either the data circulation within the city government is still problematic, and in this context it was impossible to derive the required information, or the city project manager did not treat leased nonresidential property as a documented category.

LAND MARKET

Secondary land markets comprise four major types of transactions: sales between private owners, leases of privately owned land, sales of lease rights to publicly owned land (either municipal or state) by one lessee to another, and subleases of such land.

The data available justify the following general conclusions about the secondary land market: (1) Its development (as well as privatization) is rather different in different cities, and (2) in several cities it is very active, especially in sales of privately owned land.

Only three cities provided the full data on their secondary land markets. The data supplied by two cities is incomplete. The available data prove that, practically, either privately owned land parcels are not leased out, or such leases are not registered (except for five registered instances in Samara). It is the same story with the sale of lease rights to municipal or state lands. The data on sales of private land and sublease of public land prove that the frequency of such transactions varies greatly in the different cities (table 1-6).

In Samara, the land sale market is very active—8.3 percent of privately owned parcels were sold in a year. The rate of land sales by corporate owners was even higher—12.2 percent. In Taganrog, the total sale rate was lower—a mere 2.4 percent per year. However, Taganrog had a very high rate of land sales by corporate owners—37.5 percent (although this high rate was based on an insignificant number of corporately owned land plots). Lastly, Pskov had no instances of land sales. It is conceivable that such transactions were not registered, because registration was not compulsory. It is not clear what has happened in Ryazan. According to the 1996 pilot indicators project, during the first half of 1996, there were 130 land sales by legal entities, equivalent to 139 percent of the annual turnover of land sales by private owners. According to table 1-6, in 1997 only two land parcels were sold by legal entities. What has happened? Perhaps the market was idle, or parties ceased to register their transactions.

Average sales prices may be calculated only for the cities of Samara, Vologda, and Taganrog. Sales prices reflect city size—lower in smaller cities. This is quite typical for the market economy: US$7.73/sq. m. in Samara, US$3.01/sq. m. in Vologda, and US$1.21/sq. m. in Taganrog. It is hard to say whether and to what extent these officially registered prices are underreported. In any event, they do not appear incredibly low, as compared with other cities' fragmentary data on land prices.

Naturally, average prices of land sold by legal entities are higher than the overall average. That is particularly evident for Taganrog. In both Samara (US$12.16/sq. m.), and Taganrog (US$10.38/sq. m.), the prices for land sold by legal entities appears reasonable. In Ryazan, the average price in two registered transactions was US$1.15/sq. m., but such a small sample does not allow any general conclusions.

In total, land transactions involved insignificant money turnover.

Review of the sublease segment of the land market lends to the conclusion that, in Samara and Taganrog, this market segment is several times less active than the sale segment. In Ryazan and Pskov there were no instances of registered subleases. However, even low activity in only two cities admits the assumption that there is a certain niche for public lands sublease transactions, although this segment is probably too weak to compete with the private land sales market.

HOUSING MARKET

For an in-depth analysis of the housing market, it is necessary to be aware of its volume. This is estimated based on three characteristics: number of transactions, the total floorspace transacted, and total value of transactions. However, it turned out that the base data on number of transactions was only available from five of the six cities surveyed. Data on the floorspace of transactions were supplied only by Ryazan (with a lack of information on some specific types of transactions). Data on transaction prices, at least in computer format, were not available from any of the six cities.[4]

However, available data and approximations based on these data permit the conclusion that all five cities that managed to provide data have a very active secondary housing market. From the number of transactions, it can be considered similar or even more active than the U.S. market on average.[5] In addition, it appears essential to note that the actual number of market transactions exceeds the level indicated in table 1-7.[6] Considering that the Russian housing market uses primarily cash rather than borrowed capital, the high rate of transactions is impressive and demands separate research and macroeconomic analysis.

Before discussion of specific figures, it is necessary to point out one technical problem that analysts may face when evaluating the rate of transactions in Russia's secondary housing market. On the one hand, privately owned and cooperative residential property is the housing that is immediately available for market transactions. Therefore, it would be reasonable to subject to analysis only this type of the housing. As table 1-7 shows, the volume of the market turnover of privately owned and cooperative property varied from 5 percent (in Ryazan) to 8.7 percent (in Samara). On the other hand, nearly all state or municipally owned units may also be involved in market transactions if they are first privatized. Hence, evaluation of the overall rate of transactions for the total housing stock also appears to be of some interest, although this may entail some underestimation because not all residential units are open to privatization. Thus, the annual volume of the housing market may be estimated as 2.9 percent to 3.7 percent of overall housing. In the United States, the annual rate of sales of existing housing varied from 3 percent to 4 percent in 1990–95.[7] It is therefore evident that even the underestimated rate of transactions at 2.9 percent–3.7 percent in the five cities surveyed is very close to the U.S. average of 3.5 percent. In addition, the rate of transactions for housing that is immediately available for entering the market is even higher than the U.S. average.

The high rate of transactions in the housing market is, first and foremost, evidence of the powerful redistribution processes within Russian society. Because of privatization,

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[4] With the enactment of the Law On Registration, it is legitimate to expect better recording of such data by municipalities. In any event, during the second year of the indicators project, special efforts should be taken to acquire complete information on housing prices in transactions.

[5] In this section our indicators are compared with U.S. national averages estimated in 1990–95. Technically, it would be more correct to take for comparison U.S. data for urban territories only, but, in view of the unavailability of such data, we believe it permissible to use U.S. national indicators, given that the rural population accounts for less than 25 percent of the American total. Sources: *Statistical Abstract of the United States, 1997*, and *Housing Statistics of the United States.* First edition.

[6] Indeed, we do not include gift transactions, part of which is nothing but latent sales. In addition, the data does not disclose the volume of exchanged municipal or state housing, which is very often exchanged with an additional bonus, which also may be treated as market transactions.

[7] In the United States the housing not allowed for sales (e.g., social housing owned by federal or state authorities) accounts for no more than 3 percent of the overall residential property; thus, it was ignored for assessing annual rates of transactions.

housing has become the key component of the wealth widely available to residents, regardless of their current incomes.[8] That is why differentiation by income within the population is accompanied by respective redistribution of housing through the housing market.

Evidently, housing demand varies in accordance with the type of residential property. Consequently, the transaction rate for each type of property is also different. Ryazan indicators show that, in general, residential units sold on the market are smaller than the city's standard apartment in average floorspace. The average floorspace for apartments is 48.2 sq. m., while the average floorspace of units involved in registered transactions is 41.8 sq. m. It is interesting to note that the average floorspace of units exchanged was 45 sq. m., while units subject to donation averaged 48 sq. m. The average floorspace of sold units was 39. 7 sq. m., only 82 percent of the average floorspace of a Ryazan standard residential unit. We suggest that this trend, purchases of smaller than average-size units, is found in the majority of Russia's cities.

Because of the unavailability of reliable data on the market prices of housing in Ryazan, we are not able to estimate the money turnover in its housing market. However, such an estimate is possible for Pskov, where some data on the housing market were available.[9] Assuming that in Pskov the ratio between the average size of sold units and standard apartment was the same as in Ryazan, 82 percent, we may compute that the average size of sold units in Pskov was 42.4 sq. m., and that total floorpsace of 83,670 sq. m. was sold (based on number of sales is 1,971). If the sales price was a minimum of US$210/sq. m., then the minimum annual turnover of housing sales was US$17.6 million. This is without regard for 1,000 transactions of exchange and donation, which include some money components.

It would be also useful to investigate the purposes for which housing is being purchased: whether the buyer is going to live in a purchased unit or whether it is an investment.

The brisk trade on the secondary housing market reveals the effective demand for housing. In countries with balanced economies, this demand is usually satisfied in two ways: through either secondary or newly constructed housing. In the United States, the annual level of newly completed residential units constituted between 32.7 percent and 39.3 percent of the existing housing sold in 1990–95. The number of completed homes is always higher than the number of new homes actually sold in the year of construction. Thus, in the United States, sales of new homes varied from 22.4 to 24.4 percent of the existing homes sold.

Table 1-7 indicates that, in four of the five cities surveyed, the level of newly constructed housing was materially lower than in a "balanced" U.S. case. In St. Petersburg new housing was 19.4 percent, and in Ryazan 28.8 percent, of the housing sold on the secondary market. Only in Vologda was there a high level of new construction—49.3 percent, which even exceeds the average U.S. level.[10]

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[8] For a detailed discussion of this issue, see B. Buckley and E. Gurenko, "Housing and Income Distribution in Russia: Zhivago's Legacy," and A. Bertaud, R. Buckley, and E. Gurenko, "Cities in Russia: The Long Shadow of History"–World Bank research papers.

[9] According to data supplied by Pskov real estate agencies and published in the *St. Petersburg Real Estate and Construction* newspaper (as of 8/24/98), housing prices in Pskov varied from $210 to $350 per square meter.

[10] Table 1-7 includes a note that the volume of newly constructed residential property targeted exclusively for market (i.e., funded by private investors) remains unknown.

Thus, we may assume that in most cities the demand for new housing remains unsatisfied. The unsatisfactory rate of new speculative construction may be explained by four factors:

(1) Difficulties persist in acquiring land for development in those districts most popular with final buyers of housing. Land for development is still not available on the secondary land market, especially for corporate developers. Cities also have outdated administrative patterns of land allocation that are not market-driven.

(2) The high cost of construction makes the new housing unaffordable for the majority of customers. New residential units cannot compete with much cheaper existing (secondary) units. There are two sets of reasons for the high cost of residential property construction. First, construction companies persist in using expensive prereform construction technologies. Second, the requirements established by cities, or its organizations responsible for infrastructure servicing, may increase the growth of overall development costs of construction or renovation (we shall deal with this problem below). In the following section we will cite the data on the cost of newly constructed housing.

(3) Construction loans are unavailable. If developers had the opportunity to use construction loans, instead of shared participation or advance payment by prospective unit owners, many construction projects would be more cost competitive.

4) Private developers have insufficient experience in marketing and realizing potential niches in the housing market.

NONRESIDENTIAL PROPERTY MARKET

The available data allow estimation of the sales volume for the secondary market in nonresidential property for only Samara and Ryazan (table 1-7). In both cities, this market segment was the most active among the three segments reviewed (land, residential, property, and nonresidential property). Annual sales in each city average 40 percent (39.4 percent and 42 percent, to be exact) of the privately owned stock. It is evident that there is a high rate of unsatisfied demand for this type of property. Data on transaction costs were not available.

CONSTRUCTION AND TERMS OF DEVELOPMENT

Throughout the world, construction is deemed a very significant indicator of the overall status of the national and local economy, as well as an indicator of local investment programs. Construction activity is very sensitive to economic changes; thus, construction rates can offer insight into the economies of various cities across Russia. Traditionally, simple indicators used in many countries are the number of construction permits issued and the number of completed projects. More detailed data usually differentiate among various types of projects (single-family and multifamily housing, commercial, industrial, etc.).

VOLUME OF CONSTRUCTION

In table 1-8, two base indicators, the number of construction permits issued and the number of completed projects, are used. Taken together, these indicators identify the economic status of a city for the last two to four years, because the number of completed projects covers a year or two preceding the year under review, and the number of building permits covers the current period and the year to come. Unfortunately, three of the six cities surveyed provided questionable data on the number of competed projects (as indicated in

table 1-8). Thus, the data supplied by municipal architectural and construction authorities who issue acts of acceptance were tangibly inconsistent with the data provided by municipal statistics authorities who record all new construction projects. The latter figures for these cities were always higher.

The cities of Taganrog, Ryazan, and St. Petersburg did not have material discrepancies in data. The per capita level of initiated and completed projects in Taganrog was twice as high as in Ryazan, and 3.2 times higher than in St. Petersburg. Unfortunately, these three cities cannot serve as a sufficient basis for determining a statistical correlation between construction volume and other indicators, including those depending on municipal policies.

STRUCTURE AND VOLUME OF CONSTRUCTION CAPITAL INVESTMENTS; CONSTRUCTION COST

Compilation of the data supplied by municipal architectural and statistical authorities allowed the assessment of the level of capital investments in three pilot cities: Vologda, Taganrog, and Pskov (table 1-8). This level ranged from US$70 per capita in Taganrog to US$144 per capita in Vologda. Investments in residential construction constituted from nearly 84 percent to 91 percent of overall investments. In Vologda and Pskov, one square meter of housing required US$432 of investments, whereas in Taganrog US$328 was required.

These figures deserve some comments. First, they are indicative of disproportionate investment by types of construction, implying deficient financing of nonresidential property and infrastructure. For example, in the United States, housing investments account for 44 to 46 percent of total construction investment, while investment in nonresidential property accounts for 32 to 34 percent, and infrastructure accounts for 22 percent.[11]

Second, data disclosing the value of investments should be treated with care. It is not always clear what is included in the cost of newly constructed projects. Traditionally, it should indicate the cost of construction. As a rule, posted cost of construction is based on officially declared construction cost indices, which may be based on estimated figures. Therefore, it is difficult to say to what extent the declared cost of a completed project reflects actual construction costs incurred by developers. On the other hand, it is also not clear whether these figures include land acquisition and infrastructure fees paid by developers.

Nevertheless, if we assume that indicators in table 1-8 are representative, then they can be used as evidence of the low level of new housing construction due to its high cost. For example, in Pskov the average cost of completed housing is shown as US$432 per square meter, whereas on the secondary market the price was $210 to $350 per square meter. In the United States, the average sales price of new housing amounts to 118 percent of the average cost of secondary housing.[12] If we presume that, in order to raise the competitive capacity of newly constructed housing in Russia, its cost should correlate with the cost of secondary housing in the same correlation as in the United States, then for Pskov the average sales cost of new housing should be substantially lower, down to the level of $330/sq. m. compared to the officially declared US$432/sq. m.

In this context, both municipal and federal authorities are strongly advised to take into account the present relationship between the cost of new and secondary housing when formulating their housing programs. In targeted programs, like housing programs for retired

[11] Data for 1994–95.

[12] These data are specific to the most popular individual type of housing.

servicemen, it appears preferable to subsidize buyers for purchase of either new or secondary housing, rather than to subsidize developers. In cases when federal or municipal governments choose to subsidize developers, they should carefully assess the volume and framework of such subsidies. The share of developers' subsidies should be as small as possible, the developers should be selected competitively, and contracts should be awarded only to the most cost-effective.

UNCERTAIN TERMS OF DEVELOPMENT

The transitional status of the economies of Russian cities, which are a mix of centralized and market-oriented elements, makes it nearly impossible to carry out a quantitative analysis of development indicators. An example is the problem of land availability for developers. There is a common perception that there is a lack of parcels in the most popular districts. This is one of the most frequently cited obstacles for successful implementation of construction and renovation projects, although it is very difficult to measure this deficit. Traditional Soviet economic indicators, such as the number of parcels allocated for development, lose their significance, because the allocation of parcels for development ceased to be the only means for land acquisition for construction. Currently, for many Russian cities, the process of the privatization of land tenures (with the right of land development included in the bundle of rights) is more relevant.

Another example of quantitative uncertainty in development indicators is associated with another factor typical in transitional economies: a high volatility of development costs, particularly land and infrastructure costs. It is common knowledge that municipalities and service providers may charge developers, especially private ones, large fees that make projects unfeasible. This causes contractors to freeze projects. Problems of this kind usually arise because of (1) inconsistent requirements set by different authorities and (2) the high level of requirements. Thus, in most cities, fees charged by the municipality for the right to develop a land parcel (regardless of what such fees are called) do not correlate with developers' expenses for off-site infrastructure required by utilities providers. Fee amounts also constitute a manifold problem. First, most municipalities do not understand that the amount that private developers can pay is determined by the market rather than by administrative ordinances or theoretical models. Second, utilities are often provided by natural monopolies, most of which are now privatized. This leaves municipalities with very limited control over their requirements for capital investments and connection fees. Third, the development of municipal infrastructure finance is in its infancy. Therefore specific project requirements set by municipalities are often their attempt to solve the problem of long-term infrastructure finance exclusively at the expense of private developers.

Table 1-8 illustrates that land and infrastructure fees charged corporate developers by one and the same municipality may differ by 2–4 times, irrespective of market value of the land. They generally range from 10 to 50 percent, with the average fee amount not dependent on the size of the city.

According to table 1-8, St. Petersburg and Pskov have a more consistent system of fee regulation. The least coordinated system is used in Taganrog (however, that does not prevent Taganrog from having the highest level of construction activity).

It is worth mentioning that many cities are continually attempting to improve their investment climate for developers. St. Petersburg has dramatically cut (nearly halved) its development requirements. In 1993, the aggregate amount of city and infrastructure requirements accounted for 59 percent of the total cost of construction. In 1997, this level was 25 to 35 percent, though these figures are applicable only to land parcels directly allocated by

the municipality. It is still not clear who controls infrastructure requirements in the case of renovation or development of a privately owned land parcel by its owner.

It is important to emphasize that all above-mentioned data on developers' land, infrastructure costs, and the cities' efforts to improve their land development policies refer exclusively to corporate developers, while the relations between individual developers and utility providers remain mostly ungoverned. To some extent, this again demonstrates the inconsistency of municipal land policy. In fact, as we have already stated, most municipalities prefer to privatize land to individuals rather than to legal entities. Concerning infrastructure development of land, they have recognized mainly corporate entities.

LAND AND REAL ESTATE AS SOURCES OF MUNICIPAL BUDGET REVENUES

The issue of increasing municipal revenues is of vital importance for Russian cities because the majority of them have budget deficits. In 1997, four of the five cities that provided budget information had budget deficits. Raising revenues from real estate should be carefully examined by municipalities. However, it is advisable to analyze the current situation before proceeding to discussions of possible improvement.

There are five major sources of revenues derived from land and real estate:

- sales of property and land (mainly privatization);
- land taxes;
- property taxes (approximately 50 percent of the property tax paid by companies is derived from real estate[13]);
- land leases; and
- leases of commercial property.

Table 1-9 shows that the total contribution of these sources to municipal budgets is rather large, although it may vary widely from city to city—from 10.3 to 31.5 percent. Another peculiarity worth mentioning is that the property tax in particular is a leading source and may account for 6 to 18.1 percent of budget revenues. Notwithstanding the fact that assessment of real estate constitutes only half of total property taxes assessed,[14] it is considered the principal source of revenues derived from real estate and land. The dominant role of the property tax can be explained by the fact that this tax is paid by a greater number of taxpayers than any other tax (see table 1-10).

There is no certain second-most-important source of revenues. In general, three other sources, the land tax, leases of nonresidential property, and land leases, have approximately equal importance for municipal budgets. The maximum level—6 percent of budget revenues from leases of nonresidential property—was achieved in St. Petersburg, with 5.4 percent from leases of land in Taganrog.

[13] This estimate was derived from a pilot project on introduction of a single real estate tax in the cities of Tver and Novgorod.

[14] This ratio is true for property taxes paid by legal entities, but with some reasonable approximation it may be legitimately applied to overall property taxes, since corporate property taxes constitute the bulk of property taxes collected.

The most insignificant source of revenues for all cities is the sale of property: None of the cities managed to exceed the level of 0.4 percent (table 1-9).

It is quite evident that cities may increase their recurrent revenues derived from land and real estate without revising relationships with upper budgets (i.e., without revising the municipal part of shared taxes). There are three ways to increase the revenues: (1) improve payments collection, (2) increase rent rates, and (3) revise allocation of municipal property for operative management and full economic jurisdiction in cases where it is not generating income to the city.

BETTER COLLECTION OF RENT AND TAXES

Table 1-10 and the more detailed Appendix show that often low levels of budget revenues result from the poor collection of taxes and rent. For example, in Samara, only 35 percent of taxes due were collected (but the complete amount remained in the city budget). In Ryazan, rent for land was collected at 73.9 percent of the amount due (while half remained in the city budget). In Taganrog, only 67.9 percent of rent for leased nonresidential property was paid (but the complete amount remained in the city budget). In defense of the companies/debtors, the municipalities often argue that many companies are unprofitable and unable to pay, and that bankruptcies would result if they were pressed. We may respond that, of course, municipalities should take careful approaches, but they still have some options for improving the situation. The safest remedy is to establish a more rigid discipline for the payment of rent for nonresidential property. Table 1-10 and attached tables show that, from the five cities that furnished data, only two managed to exceed the 90 percent level of rent collected for the lease of nonresidential property. (Vologda managed to collect 99 percent, with 60.7 percent of the collected amount still in the city budget; in Ryazan, the rate was 91.2 percent; and Pskov came close with 88.2 percent.) If Taganrog achieved the collection level of 95 percent instead of 67.9 percent, its revenues would increase by an overall 1.3 percent without the need to review rent rates.

INCREASE IN RENT RATES

Revision of rates should be conducted separately for land and nonresidential property rents. For example, 16,166 lucky tenants in Samara leased 2,704 hectares of land in 1997 and had to pay less than one cent per square meter (see table 1-10). Is it possible to increase this rent rate? Had the average rate been increased to the level charged in Ryazan—30 cents (1,735 rubles in 1997 prices) per square meter—and the rate of collection remained 70.3 percent, the city of Samara would have realized 1.5 percent more in total budget revenues.

The collected data produced a surprising result: There is no tendency for land rent rates to be higher than land tax rates. Direct data for the comparison were provided by Ryazan and Taganrog only (see table 1-10). In Ryazan, the rent rate was higher compared with the tax rate, and in Taganrog, vice versa. As mentioned above, rent rates in Samara were so low that it is impossible for the tax rate to be lower, given the fact that the land tax produced reasonably high revenues for the city budget. This means that in at least in two of the cities, Taganrog and Samara, leasing of land is disadvantageous for municipal budgets, compared with private ownership of land.

It is also common knowledge that, in most cities, municipal rates set for the lease of nonresidential property are far lower than the rates on the secondary market. Average rents of office or retail leases on the secondary market are from 14 to 29 times higher than average municipal rents. Immediate increase of municipal rates up to the secondary market level

would not be possible. However, even conservative measures might do the job. Table 1-9 displays the results of a simulation for raising rates for the lease of nonresidential property according to the following scenario: to lease out 5 percent of nonresidential stock at the secondary market rate, 10 percent at half of the market rate, 50 percent at double the municipal rate, and the rest at the current average rate. As table 1-9 shows, under this scenario, city budget revenues would grow by an amount between 3.2 and 5.9 percent of 1997 revenues. This is a substantial increase, inasmuch as it might be reached through improved property management in only one function, without touching other issues such as an increase in rent collections.

INCREASE IN REVENUES FROM NONRESIDENTIAL PROPERTY TRANSFERRED IN ECONOMIC JURISDICTION, OR OPERATIVE MANAGEMENT

Most cities fail to have a regular inventory of such transferred property and revenues derived from it (e.g., taxes paid by companies operating the property transferred). That is why special efforts should be taken for proper inventory and valuation of this property. Available circumstantial data show a high potential for this reserve. First, the overall size of such property may be greater than the city's social needs require, so that the city might treat such surplus property as prospective commercial sites. Second, a special study undertaken in Dobrich, Bulgaria, which faces similar problems with land and real estate, proved that the lease of nonresidential property allocated to municipal companies might produce an 11.5 percent increase in city revenues. This estimate is based on a reasonably conservative assumption that the property is leased out at the lowest market rate.

It is apparent that an increase in municipal revenues from land and real estate may be reached only through continuous coordinated efforts taken at different—municipal, subfederal, and federal—levels. In general, we are dealing with the improvement of *land and real estate portfolio management by municipalities*. In modern usage, asset management denotes acquisition, holding, and disposition of assets. An understanding of the fundamentals of asset management appears to be essential for further municipal activity with land and real estate.

CONCLUSIONS

1. Recommendations on how to best utilize the indicators project to improve the economic performances of the participating cities should be specially tailored for each city, based on its unique features identified by this project. We believe that this paper, along with other articles in this book, will encourage cities to revise their approach to land, real estate, and construction policies. Specifically, it appears advisable that each city should form a team that includes leading experts of the city administration and outside consultants. The team should be subordinated directly to the city's mayor or his/her first deputy.

2. None of the six project cities can be called a leader in all areas covered by the project indicators. The project suggests envisioning a “composite” city that incorporates all of the best features of the various cities. Such a city could serve as a model for identifying immediate steps that could be taken by each participating city.

3. The analysis of the land and real estate markets showed that, in all participating cities, the active part of the economy creates some effective demand for

nearly all types of real estate. Creation of a favorable environment and infrastructure for satisfying this demand should be a special concern of municipalities.

4. There is a structural imbalance in investments for construction. First, there is a disproportion between the existing and new housing on the market. Thus, the market will absorb a materially larger portion of new housing if:

- it were sold at prices lower than in 1997; and
- it better meets specific demands, particularly regarding location.

Both the private sector (developers/builders) and the municipalities are equally interested in improving the situation because it will create more job opportunities. To achieve this, the municipalities must develop a better investment climate for market-oriented developers.

Another serious disproportion is related to the inadequate investment in infrastructure and commercial development. In order to achieve better results in this area, it is necessary, first of all, to develop viable instruments of long-term infrastructure financing (for both private and public sectors). Later on, when overall economic conditions improve, the private sector will provide investment in new nonresidential construction.

5. Land and real estate have already become significant sources of municipal budget revenues, although most cities fail to utilize their full potential. There are two strategic directions for increasing revenues and improving their structure. First is extension of the independent municipal tax base. For attaining results in this area, some amendments must be introduced into at least the subfederal legislation. The second strategic direction is more efficient usage of existing revenue sources. This task may be fulfilled primarily at the municipal level.

6. Potentially, objectives of specific land and real estate policies and actions may come into conflict with each other, or they may appear to be incompatible. For example, a decision to privatize nonresidential property might contradict a city's policy of leasing it out to replenish its budget. To address such situations, municipalities should evaluate suggested programs within the framework of cost-benefit analysis.

Table 1-1
Registration of Real Estate Rights and Transactions in 1997: System Parameters

Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
Agencies Responsible for Registration of Rights and Transactions						
Land plots	LC	LC	LC	LC	LC	LC
Nonresidential stock	LC	BTI, LC	BTI	BTI	BTI	RBTI[a]
Residential stock	CRB	BTI	BTI	BTI	BTI	RBTI[a]
New construction	CRB (housing only)[b]	BTI	BTI	BTI	BTI	RBTI[a]
Mortgages	CRB (housing only)[b]	BTI, LC	BTI, LC	LC	BTI, LC	RBTI, LC
Availability of Joint Registration of Rights to Land Plot and Building(s)						
Is joint registration of rights to land and buildings possible if these rights were acquired concurrently?		No	No	No	No	No
Availability of Comprehensive Codes for Registration of:						
Land plots and buildings	Yes	No	No	Yes	Partially	Yes
Buildings and premises	No	No	No	No	No	No

LC = city land committee; BTI = bureau of technical inventory; CRB = city registration bureau; RBTI = regional bureau of technical inventory.
a. Transactions only; rights were not registered.
b. It is not clear where rights to new nonresidential properties and mortgages of land and nonresidential stock were registered.

Table 1-2
Documentation and Privatization of Land

Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
General Data						
Total documented land plots	18,798	104,513	3,157	34,517	29,742	9,076
Total documented land plots (per 1,000 residents)		**83.1**	**5.9**	**111.6**	**103.1**	**44.1**
Area under documented land use (hectares)	11,903	17,521	3,153	6,700	3,090	1,891
Ownership and Use (Percentage of Total Documented Land Plots)						
Total documented land	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private ownership:	**78.6%**	**26.2%**	**50.4%**	**N/A**	**78.1%**	**2.6%**
owned by natural persons	68.7%	25.7%	45.6%	N/A	78.1%	2.4%
owned by legal entities	9.9%	0.5%	4.8%	N/A	0.1%	0.2%
Public ownership, leased out:	**N/A**	**15.5%**	**37.6%**	**4.0%**	**18.4%**	**13.1%**
long-term leases (15 years and longer)	6.7%	0.2%	7.2%	N/A	0.2%	0.5%
medium-term leases (5–15 years)	1.0%	6.9%	23.0%	N/A	5.7%	6.6%
short-term leases (less than 5 years)	N/A	8.3%	7.4%	N/A	12.6%	6.0%
Rights of use	**3.0%**	**9.8%**	**6.1%**	**N/A**	**2.5%**	**4.7%**
Inheritable life tenure	**10.7%**	**48.5%**	**5.9%**	**N/A**	**0.8%**	**79.6%**
Ownership and Use (Percentage of Total Area of the City)						
Total documented land	**8.5%**	**38.2%**	**14.1%**	**57.9%**	**38.8%**	**20.1%**
Private ownership:	**5.1%**	**2.4%**	**0.9%**	**N/A**	**17.5%**	**0.2%**
owned by natural persons	1.0%	2.1%	0.5%	N/A	17.5%	0.1%
owned by legal entities	4.2%	0.3%	0.4%	N/A	0.0%	0.1%
Public ownership, leased out:	**N/A**	**5.9%**	**11.0%**	**5.4%**	**12.9%**	**5.4%**
long-term leases (15 years and longer)	1.1%	1.7%	1.9%	N/A	0.0%	0.4%
medium-term leases (5–15 years)	0.1%	2.7%	8.7%	N/A	12.8%	4.5%
short-term leases (less than 5 years)	N/A	1.5%	0.5%	N/A	0.1%	0.5%
Rights of use	**2.1%**	**25.6%**	**2.1%**	**N/A**	**8.2%**	**6.8%**
Inheritable life tenure	**0.1%**	**4.3%**	**0.1%**	**N/A**	**0.2%**	**7.7%**

Table 1-3
Selected Parameters of the Policy on Documentation and Privatization of Land Rights, as of 1/1/97

Parameters	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
Documentation rate	Low	High	Low	High	High	Average
Occurrence of premarket rights among those with documented land tenure	Low	High	Low	Average*	Low	High
Orientation toward private land ownership for legal entities	High	Low	Low	Low*	Low	Low
Orientation toward private land ownership for natural persons	High	Low	Average	High*	High	Low

* Conclusions are based on data as of 1/1/97, collected under another project.

Table 1-4
Residential Stock and Privatization

Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
Inventory Data						
Total residential buildings:	43,717	35,983	13,782	~ 6,500	37,880	7,483
Total residential units:	**1,605,000**	**435,771**	**190,000**	**103,000**	**124,000**	**77,000**
Including single-family and town houses (% of total)		**8.2%**	**7.5%**	**3.5%**	**31.3%**	**9.7%**
Distribution by Ownership Type (% of Total)						
State, municipal, and mixed ownership	**54.0%**	**57.2%**	**50.0%**	**53.5%**	**28.3%**	**55.0%**
Cooperatives	**17.4%**	**7.2%**	**10.2%**	**8.0%**	**5.3%**	**6.2%**
Private ownership*	**28.6%**	**35.6%**	**39.9%**	**38.5%**	**66.1%**	**38.7%**
Condominiums						
Number of registered condominiums	28	~ 8	56	2	No	No
Number of units in condominiums (% of total residential units)		N/A	N/A	0.15%	0.00%	0.00%

* Includes privatized housing and housing initially registered as private property. Real number of units in private ownership is higher, because paid-off cooperatives automatically become private properties, while statistical data continues to treat them as cooperatives. For example, in St. Petersburg about 90 percent of cooperative apartments are fully paid off, so the total number of units in private ownership is at least 28.6% + (0.9 Ч 17.4%) = 44.3%.

Table 1-5
Nonresidential Stock and Privatization

Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
General Data						
Total documented nonresidential units	**11,680***	**5,458**	**2,813**	**N/A**	**~1,904**	**N/A**
Total documented nonresidential units, per 1,000 residents	**2.5**	**4.3**	**5.3**	**N/A**	**6.6**	**N/A**
Distribution of Documented Stock By Ownership and Use						
Municipal and state ownership:	451*	4,748	2,358	1,714	1,469	N/A
leased out	N/A	2,559	715	513	653	674
Conveyed into full economic jurisdiction and operative management	395	~1,800	1,014	N/A	773	N/A
Private ownership	11,229	710	455	N/A	~435	N/A

*Data do not include municipal rental stock; such units number about 20,000; total area = 5,182,000 square miles (as of 1/1/97).

Table 1-6
Secondary Land Market Activity

Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
Sales						
Total sales	N/A	2,276	N/A	239	566	0
Annual turnover (total sales to total privately owned land plots, %)		**8.3%**	**N/A**	**N/A**	**2.4%**	**0.0%**
Transactions amount (US$)[a]	N/A	$8,042,459	N/A	$1,641,560	$329,471	N/A
Area of sold land plots (hectares)	N/A	104.1	N/A	54.5	27.21	0
Average selling price (US$/sq.m.)[a]	**N/A**	**$7.73**	**N/A**	**$3.01**	**$1.21**	**0**
Sales by legal entities	N/A	69	2	N/A	6	0
Annual turnover (ratio of total sales by legal entities to total land plots in private ownership of legal entities, %)		**12.2%**	**1.3%**	**N/A**	**37.5%**	**0.0%**
Transactions amount (US$)[a]	N/A	$3,138,239	$1,038	N/A	$38,395	N/A
Area of sold land plots (hectares)	N/A	25.80	0.09	N/A	0.37	0
Average selling price (US$/sq.m.)[a]	**N/A**	**$12.16**	**$1.15**	**N/A**	**$10.38**	**$0.00**
Subleases						
Number of subleases of leased publicly owned land[b]		94	0	N/A	105	1
Annual turnover (subleases to total leased publicly owned land, %)		**3.5%**	**0.0%**	**N/A**	**10.2%**	**0.2%**
Area of subleased land plots (hectares)	N/A	9.100	0	N/A	0.625	1

[a] Prices were taken as stated in the sale/purchase contracts (calculated for the dollar exchange rate as of end of July 1997: 1 dollar = 5,782 rubles). According to widespread opinion, these prices are understated as compared to actually paid amounts.

[b] It is not clear whether the data indicate subleases concluded during 1997 or since public lands began to be leased out; in the latter case, comparison between annual turnover on sublease market and sales market is not possible.

Table 1-7

Activity in the Market for Housing, Nonresidential Properties, and Mortgages

Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
Secondary Market for Existing Housing						
Total sales and exchanges	56,448	16,225	4,732	2,942	N/A	2715
Annual turnover 1 (ratio of number of transactions to total residential units in private or cooperative ownership, %)		**8.7%**	**5.0%**	**6.1%**	**N/A**	**7.9%**
Annual turnover 2 (ratio of number of transactions to total residential units, %)		**3.7%**	**2.5%**	**2.9%**	**N/A**	**3.5%**
Market for New Housing						
Number of commissioned new residential units[a]		3,195	1,362	1,450	807	631
New units to sales of existing housing, %[b]		**19.7%**	**28.8%**	**49.3%**	**N/A**	**23.2%**
Secondary Nonresidential Market						
Total sales	N/A	280	191	260	N/A	94
Annual turnover (ratio of number of transactions to total units in private ownership, %)		**39.4%**	**42.0%**	**N/A**	**N/A**	N/A
Mortgage Loans						
Number of registered mortgage loans	191	82	29	51	13	53
Number of registered mortgage loans per 1,000 residents		0.07	0.05	0.16	0.05	0.26

[a] Actual housing commission may be higher because not all new single-family houses are registered.
[b] The ratio of new to existing housing sold on the market may be lower than stated here because some of the newly constructed units are not used to satisfy market demand. Housing built at the expense of the state budget is often allocated through nonmarket mechanisms. As a rule, the volume of such construction is not high, but concrete data on participating cities are not available.

Table 1-8
Developers Activity

Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
Construction Activity						
Number of issued construction permits	1,286	217	165	57	137	20
Number of issued construction permits, per 1,000 residents		**0.17**	**0.31**	**0.18**	**0.47**	**0.10**
Number of completed projects	375	105[a]	146	86[a]	189	18[a]
Number of completed projects, per 1,000 residents		**0.084[a]**	**0.274**	**0.278[a]**	**0.655**	**0.088[a]**
Amount	0.35	0.26[a]	0.58	0.46[a]	1.13	0.18[a]
Investment Volume and Structure						
Completed investment projects (US$)	N/A	N/A	N/A	$44,608,000	$20,311,000	$25,596,000
Completed investment projects, per capita (US$):		N/A	N/A	$144	$70	$124
residential construction (% of total)				90.8%	86.4%	84.0%
unit cost of investments in completed residential construction projects (US$/sq. m.)				$432	$328	$432
Developer Costs Structure						
Expenses related to land use and development, % of construction cost Including expenses for development of infrastructure or a fee for compensation of respective costs		44	29–48	10–20	N/A	10–42
Did the city control the size of connection fees to off-site infrastructure charged by utility providers?[b]		Yes	Partially	Partially	No	Partially
Did the city control the costs of creating off-site infrustructure placed on developers in accordance with the technical assignments of utility providers?[b]		Sometimes	Sometimes	Sometimes	No	In most cases
Did the fees charged by the city depend on the fees for, and costs of, off-site infrastructure?[b]		Rarely	Rarely	Rarely	Rarely	As a rule

[a] These data understate the number of completed projects.
[b] This refers to legal entities only; control over the costs borne by natural persons was practically nonexistent.

Table 1-9
Contribution to the City Budget of Different Revenue Sources Related to Land and Real Estate

Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
Total revenues from land and real estate (US$)		$46,643,497	$29,290,069	$15,928,744	$10,464,026	$5,468,315
Total revenues from land and real estate (% of city budget revenues)		**12.0%**	**23.1%**	**15.8%**	**22.4%**	**10.3%**
Including:						
land sales	N/A	0.4%	0.0%	N/A	0.2%	0.0%
sales of nonresidential properties	N/A	0.3%	0.0%	N/A	0.4%	0.1%
land tax	1.0%	2.0%	1.6%	2.3%	5.4%	1.5%
property tax[a]	18.0%	8.6%	18.1%	10.8%	13.3%	6.0%
land leases	2.7%	0.0%	2.2%	1.3%	1.1%	1.0%
leases of nonresidential propeties	6.0%	1.1%	0.9%	1.0%	2.1%	1.7%
Potential growth of revenues from nonresidential leases[b]		**4.6%**	**3.2%**	**N/A**	**5.9%**	**5.4%**

Notes.
[a] As is known, only a portion (about 50%) of revenues in property tax stated here come from real estate.
[b] The scenario that makes such growth possible presumes that 5% of nonresidential properties will be leased for an average market price, 10% for one-half of the average market price, 50% for twice the average municipal rent, and the remaining 35% for the current average municipal rent.

Table 1-10
Municipal Revenues from Land and Real Estate

Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
Land Sales (Privatization)						
Sales volume (hectares)	N/A	33.5	0.08	N/A	6.60	N/A
Sales proceeds (US$)[a]	N/A	$1,512,954	$11,934	N/A	$73,504	$2,248
Average sale price (US$/sq. m.)	**N/A**	**$4.52**	**$14.92**	**N/A**	**$1.11**	**N/A**
Revenues retained by the city budget (%)	N/A	55.3%	100.0%	N/A	69.9%	100.0%
Sale (Privatization) of Nonresidential Properties						
Sales volume (sq. m.)	N/A	25,345	N/A	N/A	3,151	1,843
Sales proceeds (US$)		$1,127,949	$53,615	N/A	$202,352	$55,344
Average sale price (US$/sq. m.)	**N/A**	**$44.50**	**N/A**	**N/A**	**$64.22**	**$30.03**
Revenues retained by the city budget (%)	N/A	59.1%	100.0%	N/A	79.5%	79.7%
Land Tax						
Number of taxpayers	38,621	96,162	19,030	27,417	24,000	8,360
Taxable area (hectares)	N/A	N/A	3824	N/A	2,500	N/A
Total taxes assessed (US$)	$19,681,771	$21,815,998	$5,420,270	$3,106,710	$2,940,159	$841,283
Average tax (US$/sq. m.)	**N/A**	**N/A**	**$0.14**	**N/A**	**$0.12**	**N/A**
Taxes actually received into the city budget (%)[b]			37%	74%	86%	92%
Property Tax[c]						
Number of taxpayers	1,381,735	245,333	125,388	43,452	70,499	78,756
Total taxes assessed (US$)	$316,672,432	$101,878,295	$25,920,097	$17,228,641	$17,579,038	$5,160,654
Taxes actually received into the city budget (%)[b]			88.7%	63.6%	35.3%	61.5%
Land Leases						
Number of tenants	N/A	16,166	1,362	1,383	5,484	1,457
Area of leased land (hectares)	N/A	2,704	2,496	624	1,031	505.6
Total rent due (US$)	N/A	$12,885	$7,609,824	$2,493,774	$605,327	$1,038,879
Average rental (US$/sq. m.)	**N/A**	**$0.00**	**$0.30**	**$0.40**	**$0.06**	**$0.21**
Rental payments actually received into the city budget (%)[b]			36.9%	51.0%	82.2%	49.8%
Leases of Nonresidential Properties						
Number of tenants	N/A	2,559	715	481	653	474
Area of leased premises (sq. m.)	N/A	522,621	131,590	93,269	82,283	77,417
Total rent due (US$)		$5,372,190	$1,194,637	$1,583,604	$1,476,610	$1,015,393
Average rental (US$/sq. m.)	**N/A**	**$10.28**	**$9.08**	**$16.98**	**$17.95**	**$13.12**
Rental payments actually received into the city budget (%)[b]			91.2%	60.7%	67.9%	88.2%

Notes:
[a] Data are stated in U.S. dollars for easy comparison with data on the secondary market; the exchange rate is taken as: 1 dollar =5,782 rubles (rate as of end of June, 1997).
[b] Amounts accrued to the city budget after deductions to higher-level budgets, with account for nonpayments.
[c] As is known, only a portion (about 50%) of property tax revenues stated here come from real estate.

MUNICIPAL REVENUES FROM REAL ESTATE: INDICATOR-BASED PLANNING

Alexander A. Vysokovsky

INTRODUCTION

Russia obtained a set of real estate indicators that represent a unique informational system. For the first time (on the basis of six cities), an attempt was made to provide an integral and "operational" description of one of the most complicated spheres of urban economics and economic activities. For the post-Soviet Russia, which has only started down the road of market relations and market-oriented activities, this has been a difficult task.

The real estate market and municipal asset management are segmented, and every segment is subject to different regulators as well as responding differently to macroeconomic changes. For example, the current financial crisis has resulted in a strong and swift response from the secondary nonresidential lease market—tenants are vacating their premises in mass; thus, the demand plummets and the prices follow suit. Secondary housing sales are also dependent on the situation in the general economy, but the prices showed less response to the crisis. In addition, the real estate market and municipal asset management are complicated systems with a great number of elements and factors that determine their development or stagnation. Conflicting and overlapping interests of different population groups, individuals, and legal entities compound the problems. The complexity and heterogeneity of the real estate sector and the multifaceted nature of regulating asset management obstructed both the understanding of this sector as a unified system and its ongoing monitoring and regulation as a unit.

In addition, the traditional "Soviet" approach did not recognize real estate to be important to the municipal economy. The basic socialist urban development theory viewed industry and industrial production as the only economic bases of a city that were possible; thus, all governmental goals and administration methods currently incorporate this assumption. Taxes and statistics were tied directly to industrial development. This contrasts with the approach adopted in developed capitalist countries, where real estate is considered to be an object of municipal economy in general. Since the operation of property indicators, i.e., their periodic updating and analysis, required time and labor resources, a comprehensive description of the real estate sector could be produced only if it promised some financial benefits. However, if real estate is only weakly related to the economy, then such monitoring is not necessary.

And finally, a comprehensive information system will make activities more transparent, thus legalizing income and preventing illegal profit-generating schemes. Urban real estate, especially municipal property, is an easy source of making huge profits. Therefore, there are many people who do not want it controlled, since their personal interests run counter to urban development goals.

The seven to eight years of active formation of the real estate market in the country have brought good results—specialists of new professions, legal regulatory framework governing relations between the real estate market participants, etc. However, much more could have been achieved had it not been for the stubborn resistance to development of a market-based economy in general and the real estate market in particular. Thus, the cities still lack a secondary land market. Municipal and regional authorities still ardently declare that they will not

permit private ownership of land because private owners would “choke” the city by blocking decisions and projects that are of value to the local community. The federal system of property taxation for both land and improvements is extremely inefficient. The current approach might have been adequate in the first two to three years of the market formation; however, in the sixth year of mass privatization, with a new institutional structure for real property taxation already in place, the old principles have become a major stumbling block for further development.

This is the stage for discussing the results of the real estate indicator experiment. In my opinion, currently the most important task is to ensure the use of this information system in a practical decisionmaking model for city management. In light of this assertion, the purpose of the present article is to demonstrate the importance of real estate in city revenues and to analyze various strategies for improving cities’ income from municipal real estate.

REVENUE INDICATORS: RENT AND TAX COLLECTION

When first implemented, the indicators fixed mainly revenues from real estate accrued to all budgets. The financial flow in the private real estate sector was captured only partially, mainly for lack of information. For example, no data on financial flow on the secondary housing markets are available. Therefore, here and after, aggregate income from real estate will be understood as revenues collected into the budget.

The indicators provided for three positions describing real estate revenues: projected revenues (estimated due taxes and rents for land plots and premises), full revenues from real estate in budgets at all levels (actual collection of due taxes and rents), and the revenues accrued to the city budget. Analysis of the ratio between these three indicators across the cities (table 2-1) revealed the following: On average, tax collection is higher than collection of rent (85 and 72 percent, respectively). The spread of land and property tax collection indicators across the cities is rather wide—from 55.8 in Samara to 119.4 in Pskov. Collection of rents is generally lower, but the spread is much smaller—the cities continuously collect from 64 to 78 percent of rents due.

Collection rates depend primarily on the macroeconomic situation and are determined by the ability of the city’s enterprises and organizations to pay tax and rent. In every city, there were several examples where the local authorities were forced to grant tax and rent deferrals because of grave financial problems of the enterprises where the municipal governments themselves were the major employer. Secondly, this indicator depends on the efficiency of municipal use of real estate, timely identification of non-payers, and measures of tax and rent collection.

However, the above analysis permits me to make several concrete recommendations to the cities. Regardless of the economy, tax collection in Samara and Taganrog, and rent collection in Ryazan, are considerably lower than in other cities. This means that these cities have a potential for improved collection. It is difficult to determine the reason for such low collection rates by just looking at the indicators, but the indicators highlight the problem for the city administration and demonstrate the need to pay special attention to this area.

The revenues from real estate are not retained by the city alone; rather, they are reallocated among the federal, regional, and city budgets. The share retained by the city averages 75 percent for taxes and 88 percent for rent. The indicator depends on the general revenue structure of the region and negotiations between the city and regional administrations. Naturally, St. Petersburg, as a Subject of Federation, has more benefits than other cities (which will be shown later), and this fact has a serious impact on its budget. It is interesting to note that the Samara and Taganrog administrations managed to retain 100 percent of collected rents,

while Ryazan was permitted to accrue almost all land and property taxes (92.5) to the city budget. This demonstrated the possibility of achieving different allocations of tax revenues between the city and regional budgets through negotiations.

AGGREGATE INCOME FROM REAL ESTATE

The aggregate incomes from real estate were estimated using data for the cities' budget revenues and the real estate income retained by the city budget. The analysis was performed in the following way: ruble values were recalculated in dollars according to the end-of-1997 exchange rate (6,020 rubles per dollar). Then the indicators were weighted against population in reviewed cities, and only then were estimates made of the percentage of real estate in the budget revenues.

It should be noted that the term "aggregate income from real estate" is used conventionally here. It is called "aggregate" because it includes every type of revenue derived from real estate. These are proceeds from the sale of state and municipal land plots, buildings, and enterprises (as part of the privatization process and through auctions); land tax; rent for use of municipal land plots and premises paid by natural persons and legal entities; other charges on real estate (including late fees, penalties for violation of permitted land use, etc.); and, finally, tax on property of natural persons and legal entities. Evidently, the last indicator goes beyond real estate per se because Russian legislation on taxable property includes buildings and structures as well movable property (equipment, fixtures, computers, furniture, etc.). This property is classified as "fixed assets"; thus, it is subject to taxation on the basis of assessed value.

Taxation of property, rather than real estate, may be, in my opinion, regarded as an atavism of the socialist economic system, which tended to impose a tax on everything possible. Legislative proposals have been made to change the tax legislation, some of which were included in one of the drafts of the new tax code. The tax code issue is beyond the scope of this report, but it is important to note here that "aggregate income from real estate" also includes taxes on "fixed assets," including equipment, fixtures, securities, etc.

Aggregate income from real estate retained by the city budget varies from $25.50 per capita in Pskov to $110.90 in St. Petersburg. The most valuable result of the project is that the possibility of calculating this indicator has been demonstrated. For the first time in Russia, all the revenue streams were identified with a certain degree of accuracy to prove that such an indicator may be estimated. From now on, the cities should monitor the income indicator for every reporting period in order to identify management decisions that may result in its increase or decrease, qualitative characteristics and dynamics of the process, etc.

While reviewing particular values of this indicator in different cities, the first conclusion is that aggregate income in St. Petersburg is double that in Ryazan and Vologda. It may be concluded that the property management under current market conditions in St. Petersburg is qualitatively different from other cities. St. Petersburg enjoys a high level of demand from domestic and foreign investors for its land plots and buildings. St. Petersburg is also recognized for its leadership in legislative initiatives and for its creation of a favorable environment for the real estate markets. For example, the upper echelon of market-oriented federal officials responsible for the real estate sector were recruited directly from St. Petersburg. The average income from real estate calculated for the cities including St. Petersburg is $51.50 per capita. This is not very demonstrative, since the average for five cities without St. Petersburg is only $39.60 per capita. With respect to this value, the cities may be divided into two groups—St. Petersburg, Ryazan, and Vologda, which exceed the average $39.60 per capita, and Samara, Taganrog, and Pskov, which fall far below it. Therefore, the last three cities are in great need of

urgent measures to improve budget revenues from real estate and stimulate their real estate markets. The other three cities should pay attention to the issue, although it is not currently as great a problem for them.

The second important result produced by the introduction of this indicator is the ability to compare all budget revenues with income from real estate. However, before we consider the figures, let us recall certain fundamental principles of this activity. Income from real estate is one of the key revenue sources of local budgets in many market economies. According to expert opinion, income from real estate in the United States varies from 10 to 70 percent of municipal revenue budget, depending on the city or regional peculiarities. However, all revenues are accrued to the local budget and are regarded as its base. Income tax is the basis of the federal budget, and profit tax is collected in the state budgets (translated into Russian government structure, this may be interpreted as subfederal budgets). The principle of this system is considered attractive because the allocation of revenues between the budgets by tax type achieves a clear delineation of responsibilities of the different government levels for the specific aspects of public life. Therefore, budget revenues are placed into direct dependence on the performance of respective duties. Since federal authorities are responsible for citizens' rights at home and abroad, they receive income taxes. State authorities are responsible for creating a business-friendly environment and are assigned profit taxes, and municipal authorities are responsible for the human habitat and thus receive property taxes. This is of course a rough general scheme, because there are many other taxes as well as a system of redistribution of tax revenues between the governments and the lack of a responsible attitude toward obligations. However, this tax system concept is considered very attractive because it is based on certain fundamental values of a civil society.

The tax system in this country grew from the former nontax socialist system of budget formation through centralized collection of all revenues and subsequent transfer of a portion of these funds to ministries or local authorities. In terms of this reviewed issue (self-subsistence of local governments), the tax system is just beginning and has the characteristics of all potential arrangements. However, as market relations develop in the economy, the tax system is slowly evolving into a more functional and transparent mechanism. These ideas are reflected in the draft tax code. In light of this, it is interesting to consider indicators characterizing replenishment of the budget with income generated by real estate.

Calculations show that the share of total income from real estate in the local budget varies from 10.3 percent in Pskov to 31.5 percent in St. Petersburg. In other words, St. Petersburg has made better progress, as compared to other cities, in forming its revenue budget based on available resources that have a greater degree of independence from the national situation and federal regulation. In this respect, St. Petersburg is closer to Western municipalities with a market economy. Therefore, its budget is better protected from decline in production (profit tax), reduction in the volume of products/services (VAT), and growth of unemployment (income tax). So far, other cities have followed a different budget-forming strategy. Ryazan and Taganrog brought the share of real estate income in the revenue budget up to 22 to 23 percent; Pskov, Samara, and Vologda, up to 10 to 16 percent.

There is a close relationship between the amount of real estate–produced revenues accrued to the budget and their place in the structure of the local revenue budget. In terms of these two indicators, St. Petersburg is in first place; Ryazan is in second place; and Samara and Pskov are in fifth and sixth places, respectively. Vologda and Taganrog occupy third and fourth places, respectively. This demonstrates that in cities where stronger attention was paid to the real estate sector, respective revenues showed substantial growth and acquired a more important place in the revenue structure. Localities that did not give the issue adequate

attention failed to generate revenue growth and suffered a decline in production, unemployment growth, and other negative effects of the general economic crisis in Russia.

In conclusion, indicator-based planning should start with the monitoring of two key indicators—aggregate income generated by real estate and its percentage in the city revenue budget.

COMPARATIVE ANALYSIS OF VARIOUS REVENUE SOURCES

There are different types of revenues that contribute to a city's budget. In the context of income projections, revenue indicators may be classified into five groups:

- Proceeds from sale of land plots and buildings (premises), and different rights to them.
- Revenues from land (taxes, rents, penalties).
- Property tax.
- Nonresidential leases.
- Other payments for land and nonresidential premises.

Such are the most widely spread sources of municipal revenues from real estate in Russia. The practice of conveying municipal property into operative management is just emerging; thus, in this project receipts from transfer of the property into operative management are not shown as a separate position and are stated together with other receipts.

At this stage of analysis, essentially different revenues from land taxes and rents are deliberately placed into one group in order to make possible the comparison of revenues from land and other revenues from buildings and premises.

It is important to note that this analysis used somewhat different indicators from those described in the previous section. The previous section dealt with replenishment of the city budget and thus operated with aggregate income retained in the city budget, i.e., after sharing a portion of revenues from real estate with other budgets. The amount retained in the budget depends on the revenues as well as the state of affairs in the particular region. This could include contractual relations between the municipalities as defined by the budget law of the Federation on an annual basis. However, our current task is to analyze the revenue potential of different types of real estate and examine different strategies of working with this real estate. With these goals in mind, in this and subsequent analyses, another indicator is used: income actually derived from real estate. This indicator characterizes both the conditions of the property and its financial benefits for the local community. As in the previous case, calculations are made in dollars per capita.

First of all, analysis shows that the main revenue source of the city budget in the real estate sector is property tax. This tax on average makes up 66 percent of all receipts from real estate. Land-related receipts (taxes, rents, and penalties) occupy second place (18.6 percent), nonresidential leases are third (10.6 percent), and sales proceeds are in last place (4 percent).

This ratio confirms the principal strategy in real estate administration—selling, even on the best terms, is not a strategic source of revenue for a municipality. The strategic revenues will come from the owners of real estate and in particular from those who acquire property from the municipality through public sales or by way of privatization. Pricing of real estate for these transactions is not a problem of great importance. It is, of course, unreasonable to sell real estate into ownership at the peak of an economic crisis, when demand falls to an all-time low. Also it makes no sense to sell at any time for giveaway prices, which do not reflect the real market value of the property. However, it is much more important to transfer municipal property to those tenants (owners and renters) who are able to put the property to the highest and best use, and it is important to assist such tenants in achieving this goal. Depending on the property type and the nature of transferred rights, this is best accomplished through identifying the most "efficient" tenants by reviewing business plans, direct negotiations, public sales, and competitions. However, this is far from the final truth, because every "efficient" owner or user may turn into an "inefficient" owner if the business does not go well. This is why it is important to have a functional secondary market for private property and a permissive environment for subletting municipal property on a long-term basis.

Let us now turn to the case of St. Petersburg. The share of sale proceeds is the highest among the cities—up to 10 percent of the total income from real estate. The total area of land plots sold by the St. Petersburg administration (table 2-7, line 4) exceeds that of other cities. The same ratio is shared between St. Petersburg and other cities in the number of transactions and total floor space of sold nonresidential premises (table 2-8, lines 2, 5; table 2-9, lines 2, 4). In addition, St. Petersburg has the highest unit values of property tax receipts and rents from nonresidential premises and is second to Ryazan in total revenues from land (table 2-4). The structure of revenue sources demonstrates the greatest (though, in my opinion, still insufficient) degree of diversification, which then improves the reliability of the revenue system. Total budget revenues are less dependent on any single source, and if lower revenues are collected from one source, the loss may, in principle, be compensated for by using other sources. All other cities under review have a less diversified revenue structure, biased toward one or, at best, two, revenue sources.

Quite unexpectedly, the city that holds second place after St. Petersburg in total revenues from real estate is Vologda ($67.80 per capita). Vologda also shows consistently high indicators for all market segments. Third place belongs to Ryazan ($61.50 per capita). Compared to other cities, land in Ryazan brings in the highest revenues to the city budget. This may be explained by the rent and land tax management experiment that was conducted in the city. However, the greatest surprise is Samara. One of the biggest regional capitals in Russia stands in last place among the six cities reviewed in terms of revenues from its real estate ($35.60 per capita).

REVENUES DERIVED FROM CITY TERRITORY

Special attention should be paid to the strategy with respect to rights to land plots that the city conveys to natural persons and to legal entities. In the latter case, the issue is the proportion allotted to rights of ownership, permanent use, and lease. Comparative analysis of the cities shows that at present, because corporate ownership of land is limited for political reasons and, as a result, there is practically no land market, no market price, and, hence, no ad valorem taxation, the land tax is far from effective. The taxation system based on legally established rates designed at the initial stage of market reforms results in loss of potential revenue from municipal land. Under these conditions, lease is much more profitable for the city. Thus a certain trend is observed in the cities where total income from land exceeds the average: revenues from leased land per resident exceed the land tax (St. Petersburg, Ryazan,

table 2-5). The same trend will be seen if we compare average rental per lessee and average payments per taxpayer (table 2-6, lines 10 and 11).

The average amount of land tax per taxpayer[*] is only a weak variation across the cities: with the exception of Pskov, it ranges between $2,643 (Vologda) and $3,279 (Taganrog). Interestingly, in St. Petersburg this indicator is less than in Taganrog. Comparison of average rental payments per one lessee renders an entirely different spread picture. In St. Petersburg, rent paid by an "averaged" lessee was $31,427;[15] in Ryazan. $3,966; in Vologda, $914; in Pskov, $430; in Taganrog, $87; and, finally, in Samara, a fantastic $0.50. Average rent per hectare of leased land follows suit (table 2-7, line 9). The higher spread of rents as compared to land tax shows that charges for the lease of municipal property are adjusted to local conditions.

This, of course, is only a temporary condition. As the transition to market pricing of land progresses, differentiation of tax payments in cities of different status and size will inevitably increase, while rents are likely to become less differentiated as compared to the current situation. Moreover, it would not be right to advocate "killing" lessees with high rents. Both taxes and rents should reflect the real market value of land. However, to date, rents reflect market trends more accurately than do land taxes.

The revenue-generating potential of land depends on the number of payers, the size of the taxable territory, the number of leased land plots, and their prices in a given city. (The latter should be understood in the sense that market price is a universal measure of supply and demand and supply and the state of the economy. The higher the market price of real estate, the higher the tax revenues should be from it and the rental payment charged for it.) Therefore, expansion of the tax base and rental land stock, promotion of higher market prices for land by increasing the attractiveness of the city and improving the demand for land plots, etc. , should become key components in the activities of city administrations. But what is the situation now? The indicators can provide the answer.

It turns out that St. Petersburg is behind other cities in development of its land stock that is conveyed into ownership or permanent use or lease. The city has 6,403[16] corporate lessees and payers of land tax, or 1.4 payers (legal entities) per 1,000 residents. The indicator is highest in Taganrog (10.3 payers per 1,000 residents), above average in Samara and Vologda (7. 2; 7. 3), and below average in Ryazan and Pskov (4. 7; 4. 3) (table 2-6, lines 3 and 7). Unfortunately, it does not seem possible to make an exact estimate of the area of taxable land plots. The available data give only a total area of leased land plots[**] (table 2-7, lines 3 and 6). In St. Petersburg the area of leased land is quite small (0.39 hectares per 1,000 residents), but in

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[*] The indicator spreadsheets have a column for the total area of taxable land plots, but the data were provided by two cities only. It is therefore impossible to compare all cities in efficiency of land use in terms of average land tax collected from a unit of taxable area. The only way to reveal efficiency of land taxation is to compare average land taxes paid by an "averaged" taxpayer. Of course, this indicator gives an understanding of land taxation efficiency, but to a lesser extent than weighting across the territory.

[15] *Editor's note*: The data for St. Petersburg may be inexact because the city failed to provide data on the number of short-term leases while the aggregate income from leased property includes short-term leases.

[16] *Editor's note*: As noted above, St. Petersburg data do not include short-term leases of land plots.

[**] *Editor's note*: Some problems were created by incompleteness of the data provided by St. Petersburg (see note to table 2-7). However, in view of the purpose of this article—to show several scenarios for practical use of the indicators—the author decided to use the data calculated on the basis of officially provided indicators. Possible inaccuracies in the figures (but not orders of magnitude!) are compensated for by the methodical completeness of the examples.

Ryazan and Taganrog, it is relatively large compared to other cities (4. 7 and 3. 8 hectares per 1,000 residents).

Estimated market prices for land were provided by four cities out of the six participants of the indicator project (table 2-10). Characteristically, the list does not include Samara, although the secondary land market in the city is functioning. The price difference between St. Petersburg versus Ryazan and Taganrog is two times greater in the outskirts and four times greater in the downtown areas. Let us note that in view of the value and attractiveness of St. Petersburg, a fourfold difference in prices as compared to Taganrog seems not big enough. Land plots in Pskov are priced very low—three to five times less than in Ryazan. This also looks strange and may be attributed to lack of exact data (the indicator was determined on the basis of the expert opinion of real estate brokers).

Based on the provided information on the revenue base of land plots, market prices for land plots, and average rents and taxes, several recommendations for the cities may be proposed.

First, it seems that the average rent charged per square meter of land in St. Petersburg is excessive, though this statement requires additional checking. The current average rent was estimated to be $2.40 per square meter (table 2-7, line 9). However, in my opinion, market value of land in the city cannot be higher than $20–25 per square meter. This means that full capitalization of rent may occur within 8 to10 years, which is too fast by Western standards. In this connection, rent rates for some city districts or user categories should probably be reviewed. On the other hand, St. Petersburg needs a higher number of land taxpayers and lessees. Maybe St. Petersburg should temporarily suspend the policy of issuing rights-establishing documents only after the registration of land users/owners and make an aggressive effort to identify all taxpayers without pending detailed registration. It is probably necessary to increase the volume of primary sales of land to legal entities in order to expand the city's tax base. On the other hand, it seems desirable to increase the number of lessees in the cases when for one reason or another conveying land ownership is impossible. To achieve this goal, it would be necessary to increase the attractiveness of leases by providing in the lease contracts conditions that make leasing the land closer to ownership and, in addition, reducing the rent rates.

Ryazan has the highest revenue-generating capacity of city territory and adequately balanced indicators. A strategy of increasing sales of land plots into ownership and long-term leases may be recommended.

Vologda and Taganrog have average revenue-generating capacity and a sufficiently high number of taxpayers and lessees, as well as total area of leased land. This is indicative of the low efficiency of rent rates. This is particularly important for Taganrog, where receipts per lessee and hectare of leased land are extremely low.

Pskov and Samara need urgent measures to increase their revenues from land, which is now used very inefficiently. Both cities have a high number of (corporate and, importantly, individual) payers but low average returns per payer of land tax and especially in the rent per unit of area. The latter specifically concerns Samara, which should review its leasing practices on an expedient and fundamental level. Also, Pskov needs to revise its internal differentiation of land tax rates.

REVENUES FROM NONRESIDENTIAL STOCK

Indicators characterizing nonresidential stock—property tax and rent—should also be included in the planning process. For this purpose, it is proposed to use the methodological scheme described in the preceding analysis. Receipts referred to the number of residents are sequentially compared to the base from which they are collected, to average income per base unit, and to prices in the given real estate segment.

At this time, receipts in property taxes are the main source of budget revenues. The existing taxation system is structured in a way that a lion's share of tax collection falls on legal entities (98.5 percent). Therefore, it would be reasonable to limit analysis of property tax payers to legal entities. Their number in the reviewed cities varies from 11.4 per 1,000 residents in Taganrog to 23.1 per 1,000 residents in St. Petersburg (table 2-8, lines 3 and 7). It is noteworthy that St. Petersburg has the highest value of this indicator among the cities, which corresponds to the highest property tax revenues—$63.60 per resident. Meanwhile, having about the same number of payers (22.1 legal entities per 1,000 residents), Pskov receives two times less in property taxes ($28.50 per resident). My hypothesis is that the difference lies in property appraisal. The average tax per taxable unit is $2,729 in St. Petersburg and $1,265 in Pskov.

Samara and Taganrog show an entirely different trend. Both cities receive low revenues in property taxes, but the reasons are different. Following the hypothesis proposed above, in Samara property value is assessed too low—average tax returns per legal entity equal $1,485, or almost two times less than the average for the reviewed cities. However, the number of taxpayers is at the average level, and the market price of housing almost equals that in St. Petersburg. Although average property tax returns in Taganrog seem reasonable (slightly higher than the average for reviewed cities), the number of taxpayers is the lowest. Therefore, Samara needs to pay serious attention to valuation of fixed assets and real estate, while Taganrog should check its inventory of property tax payers for completeness and unjustified benefits—or privatize a portion of the state and/or municipal property, if possible.

For Ryazan and Vologda, all indicators are at an average level. The recommended strategy may involve increasing the number of taxpayers and providing a clearer definition of the tax base, because at this time average collection of property tax per entity in these cities looks slightly inflated when compared to Russian cities of similar size and status (table 2-8).

The leases of municipal nonresidential property represent the third principal source of budget revenues after real estate and land. Nevertheless, respective indicators in all cities except St. Petersburg are extremely low. While the spread between property tax collection in St. Petersburg and other cities does not exceed 1.5 to 2.5 times, receipts from lease of nonresidential properties differ in magnitude (table 2-9, line 1). However, there is every reason to assert that St. Petersburg has the biggest, in terms of floor space, rental stock[*] (1,097 sq. m. per 1,000 residents) and the highest average income per square meter of leased space ($19.20). However, at first glance, market prices for offices are not much different from those in other cities—about 25–30 percent.

Using the scheme described above, one can say that the situation is worst in Ryazan. Ryazan has the lowest budget revenues from the lease of nonresidential premises—$2 per

[*] Calculations were based on unofficial data that require verification (see notes to table 2-9). In this connection, further deliberations should be regarded as an example only though, in our opinion, the figures are fairly reliable for interpretation of the processed under review with adequate quality.

resident. This results from insufficient volume of leased nonresidential stock and the low rent rates (the latter is evidenced by low average income per square meter of leased space—$8) (table 2-9, line 7). In essence, these indicators are mutually contradictory—if too little space is leased, the price of a lease should then be high. In this situation, one may recommend measures to improve the competitiveness of municipal rental stock against the private sector by making it more attractive and expensive. In addition, municipal rental stock may be increased through planned new construction.

Rental stock in Samara is fairly big, but average rental per square meter is the lowest among reviewed cities. This could be a potential source for boosting budget revenues. Evidently, the city should implement measures to improve the attractiveness of rental properties and then raise the rent. Also, it is probably necessary to pay more attention to the rental-setting techniques and analysis of the market for nonresidential rental space.

Vologda, Taganrog, and Pskov have “medium low” income indicators for the lease of municipal stock. For these cities, one may recommend the same measures as before, depending on the concrete values of the indicators. Thus Vologda and Taganrog may increase the volume of municipal rental stock; Pskov and Taganrog should increase rentals using reasonable market mechanisms.

CONCLUSIONS AND SUGGESTIONS FOR DEVELOPMENT OF REAL ESTATE INDICATORS IN RUSSIAN CITIES

In my opinion, the overall results of the Real Estate Indicators project in the six cities turned out well. The cities were able, though with some difficulties, delays, and omissions, to complete the proposed worksheets. With the exception of Nizhny Novgorod, which “left the track” after a change of leadership, all cities coped with the task with more or less success. Ironically, the city with the most advances in market reform—St. Petersburg—completed the worksheets with the greatest number of omissions. On the whole, data reported by the cities were correct. Now the chief concern is whether the cities will find the work useful and will be able to benefit from its results. This article is intended to assist in this task by analyzing one of the components of the indicators system—projecting city budget revenues from real estate.

The first step in further development of the indicators program is discussion of results with the participating cities. It is important to build a consensus between the Russian and American experts who presented their suggestions and the local specialists. Although it is not very important for this report, such consensus is crucial for continuation of the activity. It is up to the local specialists to provide an opinion on the conclusions and proposals of the experts, as well as to offer their own suggestions and comments on the project. Further work on the project in the cities will require a revision of the indicators and probably more detailed instructions on use of the indicators to achieve the goals set by a particular city. In any case, continuation of the indicator program will require systematic follow-up on their dynamics in each city.

The second step will be expansion of the project scope by including new participating cities. Any public relations technique may be applicable here. In particular, new participants may be given collected materials, a conference may be organized, etc. Special provisions should be made to persuade federal ministries to promote the indicator projects.

In any case, the project should be given coverage in the mass media. A special informational event—a presentation of collected materials and the project results to which to the mass media are invited—would be a useful vehicle.

Table 2-1. Taxes and Rents on Land and Property Collected in 1997

	Taxes					Rents		
	Total due, RR mln*	Total paid, RR mln*	Collection rate, %	Retained by the city	% of the total	Total due, RR mln*	Total paid, RR mln*	Col rat
St. Petersburg	$1,944,800	$1,901,033	97.7%	$1,901,033	100.0%	N/A	$926,565	
Samara	715,200	398,890	55.8%	236,688	59.3%	31,137	24,313	
Ryazan	181,210	156,222	86.2%	144,583	92.5%	63,414	40,962	
Vologda	117,579	106,724	90.8%	76,581	71.8%	23,700	16,900	
Taganrog	118,642	72,737	61.3%	50,608	69.6%	12,062	8,700	
Pskov	34,703	41,434	119.4%	22,797	55.0%	11,975	9,062	
Average			85.2%		74.7%			

* Rubles (millions)

the City Budget

	Indicators	St. Petersburg	Samara	Ryazan	Vologda
1	Revenue budget, RR mln*	$9,970,200.0	2,251,457.0	732,647.0	584,500.0
2	RE income, RR mln*	3,136,837.0	269,629.7	169,355.2	92,086.9
3	Revenue budget, $ mln	1,656.2	374.0	121.7	97.1
4	RE income retained by the city, $ mln	521.1	44.8	28.1	15.3
5	Revenue budget, $ per capita	352.4	297.5	228.0	313.9
6	RE income retained by the city, $ per capita	110.9	35.6	52.7	49.5
7	RE income to revenue budget ratio	31.5%	12.0%	23.1%	15.8%

Table 2-3. Structure of Real Estate Revenues by Type (Percentage of Total Real Estate Revenues of the Budget)

	Indicators	St. Petersburg	Samara	Ryazan	Vologda	Ta
D1100g	Sales proceeds	9.8%	3.2%	0.2%	2.1%	
D2110g	Land (taxes, rents, penalties)	12.0%	16.3%	29.3%	17.4%	
D2120g	Property tax	57.4%	71.5%	67.3%	73.3%	
D3130g	Nonresidential lease	19.0%	9.0%	3.2%	7.2%	
D3140g	Other payments for land and nonresidential buildings	1.8%	0.0%	0.0%	0.0%	
D2100g	Total	100.0%	100.0%	100.0%	100.0%	

* Rubles (millions)

(Dollars per Capita)

	Indicators	St. Petersburg	Samara	Ryazan	Vologda
D2100g	Total RE income	110.87	35.63	61.48	67.75
D1100g	Sales proceeds	10.82	1.15	0.12	1.39
D2110g	Land (taxes, rents, penalties)	13.37	5.81	18.03	11.84
D2120g	Property tax	63.60	25.47	41.37	49.63
D3130g	Nonresidential lease	21.12	3.21	1.96	4.89
D3140d	Other payments for land and nonresidential buildings	1.96	0.00	0.00	0.00

Table 2-5. Comparison of Actually Collected Land Taxes and Rents (Dollars per Capita)

	Indicators	St. Petersburg	Samara	Ryazan	Vologda
	Total income from land (taxes, rents, penalties) in dollars per capita, including:	13.37	5.81	18.03	11.84
1	Land tax, $ per capita	3.6	5.8	7.2	7.7
2	Rents, $ per capita	9.6	0.007	10.1	4.1

* Rubles (millions)

	Indicators	St. Petersburg	Samara	Ryazan	Vologda	T
1	Number of transactions	548	1054	11	15	
2	Number of tax payers, legal entities	4,983	2,462	1,142	872	
3	Number of land lessees, legal entities	1,420*	6,605	1,362	1,383	
	Total	6,403*	9,067	2,504	2,255	
4	Number of transactions, per 1,000 residents	0.12	0.84	0.02	0.05	
5	Payers of land tax, legal entities per 1,000 residents	1.06	1.96	2.14	2.82	
6	Lessees—legal entities, per 1,000 persons	0.30*	5.25	2.55	4.47	
7	Total tax payers and lessees—legal entities—per 1,000 residents	1.4*	7.2	4.7	7.3	
8	Yield on one transaction, $ thou.	N/A	1.38	1.04	23.15	
9	Land tax, $ per payer	436.98	75.85	203.19	86.67	
10	Land tax, $ per legal entity	3,242.60	2,905.88	3,156.73	2,643.52	
11	Rental, $ per lessee	31,427.53*	0.54	3,965.65	913.92	
12	Average without St. Petersburg					

Editor’s note: Inexact data, because the number of short-term leases in St. Petersburg is not available.

Table 2-7. Actually Collected Land Revenues and Average Indicators per Unit of Area

	Indicators	St. Petersburg	Samara	Ryazan	Vologda
1	Total area of sold land (hectares)	469.0	33.5	0.8	2.0
2	Taxable area (hectares)	N/A	N/A	N/A	N/A
3	Area of leased land (hectares)	1,852.2*	2,704.0	2,496.0	624.0
4	Sold land, hectares per 1,000 residents	0.1	0.027	0.001	0.007
5	Taxable land, hectares per 1,000 residents	N/A	N/A	N/A	N/A
6	Area of leased land, hectares per 1,000 residents	0.39*	2.15	4.68	2.02
7	Average yield per hectare of sold land, $ thou.	N/A	43.38	14.33	171.32
8	Average tax collected per hectare, $	N/A	N/A	N/A	N/A
9	Average rental per hectare, $	24,433.2*	3.22	2,163.95	2,025.57

* Area of leased out state and municipal land plots is shown in two indicators. The first (“B1120b”) total area of these land plots in St. Petersburg is shown as 1,667 hectares without the land under short-term leases. The second indicator (“D3110b”) in St. Petersburg was not stated. Short-term leases in other cities average 10 percent of all leased land. For the purpose of the calculations, the area of leased land in St. Petersburg was increased by this value. Consequently, all other calculations used the same figure—1,852.2 hectares.

Taxes (Dollars per Payer)

	Indicators	St. Petersburg	Samara	Ryazan	Vologda
1	Property tax, $ per person	63.6	25.5	41.4	49.6
2	Sale of nonresidential stock, objects	471	65	18	11
3	Payers of property tax	1,381,735	245,333	125,388	43,452
4	Payers of property tax—legal entities	108,672	21,062	6,933	4,118
5	Number of deals per 1,000 residents	0.10	0.05	0.03	0.04
6	Number of property tax payers, per 1,000 residents	294.0	195.1	234.9	140.5
7	Number of property tax payers—legal entities, per 1,000 residents	23.1	16.8	13.0	13.3
8	Average yield on a deal, $	N/A	16,667.0	2,860.8	13,591.1
9	Average property tax, $ per payer	216.3	130.5	176.1	353.3
10	Average property tax, $ per payer—legal entities	2,728.9	1,485.3	3,157.8	3,682.9

(Dollars per Square Meter)

	Indicators	St. Petersburg	Samara	Ryazan	Vologda
1	Lease of nonresidential stock, $ per resident	21.12	3.21	1.96	4.89
2	Total area of sold building (premises) (sq. m.)	214,358.0	25,345.0	N/A	2,750.0
3	Leased nonresidential stock (sq. m.)	5,159,300.0	52,2621.0	131,590.0	93,269.0
4	Area of sold building (premises), sq. m. per 1,000 residents	45.6	20.2	N/A	8.9
5	Leased nonresidential stock, sq. m. per 1,000 residents	1,097.7	415.7	246.5	301.6
6	Average yield per sq. m. of sold premises, $ thou.	N/A	2,778.38	N/A	598.01
7	Average yield from lease, $ per sq. m.	19.24*	7.7	8.0	16.2

* Area of nonresidential stock leased out in St. Petersburg was not officially provided within the framework of the project. The 5.16 million square meters stated in the table was taken from publications in the open press and needs official verification.

Table 2-10. Market Prices for Real Estate in 1997 ($ per square meter)*

	Indicators	St. Petersburg	Samara	Ryazan	Vologda	Taganrog	Pskov
V3100b	Market price of a 3-room apt. *	595–615	600–750	600–700	320–336	~370	287–330
V3200b	Market price of lease in a standard office building (per year)	200–400	250–350	96–348	N/A	250***	240-360
V3300b	Market price of lease in a renovated office building (per year)	200–600**	300–350	192–960	N/A	250***	20
V3400b	Market price of a land plot	16–60	---	10–25	---	5–25****	3
V3500b	Market price of a land plot with downtown location	100	---	~25	---	---	5

Notes:

** Average secondary market prices in $ per sq. m. of total floor space in real transactions in the last quarter of 1997.*

** Without VAT and utility payments.

*** With VAT—$300.

**** From $5 in a remote district up to $15–25 in downtown areas. According to the Land Committee data, ~10,000 rubles per square meter. No real sales on the secondary market.

LAND AND REAL ESTATE INDICATORS: TOOLS FOR ASSESSING AND IMPROVING A CITY'S CREDITWORTHINESS

Clare T. Romanik

The Urban Institute, Washington, D.C. [17]

When a bank or bond investor rates a city's creditworthiness it is really evaluating the city's financial strength and its ability to pay back the loan or bond. Specifically, a bank will be evaluating the city's available collateral, its operating surplus, its general level of economic development, its performance on paying back previous obligations and other indicators of financial management. Land and real estate indicators can fill much of the information gap on these issues. Additional indicators will be necessary, however, to assess whether the city has demonstrated a high level of financial management and responsibility toward financial obligations.

COLLATERAL

A loan is usually backed by some type of collateral. For most individuals, and for some governments, tangible assets such as property or land serve as collateral. A city can also use as collateral a guaranteed stream of revenues, which is earmarked for debt service.

DOES THE CITY HAVE CLEAR TITLE TO REAL PROPERTY COLLATERAL?

In the beginning stages of the municipal credit markets in the Czech Republic, Hungary and Poland, it was important for the cities to have real property collateral to guarantee loan repayments. Only when cities began to have reliable revenues did the collateral requirements relax.[18]

EXISTENCE OF REAL PROPERTY COLLATERAL

Indicator: Municipally owned land without dedicated purpose

To determine whether it has land that can be used as collateral, a city should evaluate what land it owns that does not have a dedicated purpose. All of the indicators

[17] Alexei Novikov, the Institute for Urban Economics (Moscow), took part in the preparation of this article.

[18] Belcher, M., V. Cionga, F. Conway, P. Filip, V. Ionescu, Gh. Ocneanu, I. Onisei, G. Peterson, J. Pigey, 1997. "Romania: Municipal Creditworthiness and Local Government Decentralization." The Urban Institute, Washington, D.C.

in table B1b[19] (in the appendix) show types of land tenure that are not appropriate for collateral. For example, land that is privately owned (Indicator B1110b), or publicly owned land that is leased out (Indicator B1120b), has use rights without time limits (Indicator B1130b) or lifetime use of land (Indicator B1140b) are all not appropriate for collateral. Unfortunately, to date, information does not exist on municipally owned lands not falling into one of the above categories because there has been no reason in the past to document it. As shown by the first indicator in the table (B1100b), much of the municipal territory has not even been registered as either public or private. St. Petersburg has the lowest documented land tenure at 8.5 percent and Vologda has the highest at 57.9 percent. A city that wants to rely on real property collateral needs to figure out which portion of the undocumented land it has rights to and which portion will eventually be registered by enterprises or the public. Of the land which it owns, the city must decide which portion will be reserved for collateral purposes as opposed to leased for commercial purposes. Land without permanently attached structures and improvements will be more appropriate for collateral, while land with commercial units owned by the city (B4110a) would be better off leased out. Land attached to housing units owned by the city (B2110a) will not be attractive as collateral for lenders.

In the United States, cities own little land and yet land is their revenue base, through taxation of land ownership, sales, and development. While owning some land can be useful for serving as collateral, a city has to balance the benefits of having collateral and leasing land with the benefits of selling land to private investors who will improve the land. Selling land can be a long-term strategy for economic development and future taxation possibilities. In the Czech Republic, cities regained ownership of all the land that they had owned before 1948 and found that they owned much more land than was really necessary. A quick sell-off of all their land would have depressed the local land market, however, so the chosen approach was a gradual sell-off of land-holdings deemed excessive. Some land was kept as collateral in obtaining a municipal loan for infrastructure development.

LAND SALES

Indicators in tables D1a, b, v, and g in the appendix provide information on land and other real estate sales. They describe the pace in which cities are selling off land and other real estate and the revenues resulting from these sales. In 1997, land sales to private owners ranged from 0.08 hectares in Ryazan (Indicator D1111b) to 468 hectares in St. Petersburg. By selling off such a large portion of land (0.34 percent of its total territory) in one year, St. Petersburg is actively promoting private ownership.

Rubles received per hectare (sold to private owners) ranged from 64 million in Taganrog to 863 million in Ryazan (Indicator D1111v). Taganrog should evaluate why it sold its land for such a lower amount per hectare. Possible explanations are poor location or that the land was reserved for residential use, as opposed to commercial use. Another explanation is that the method used to sell the land did not reveal true

[19] If not otherwise specified, the land and real estate indicators referred to herein are based on 1997 data. The indicators themselves can be found in the appendix to this report.

market value. Municipal revenues from these sales ranged from 63 rubles per capita in Pskov to 6,759 rubles per capita in Vologda (Indicator D1111g).

Of the cities surveyed, sale of all lands and other real estate as well as user rights was a small part of the municipal budget—from .05 percent in Ryazan to 3.10 percent in St. Petersburg (Indicator D4110b). Because sales are not recurring revenues, they should not be used to fund operating expenditures. The small budget share realized from land sales shows that Russian cities do not rely on land sales to fund operating expenditures—a good sign in terms of creditworthiness. When land sales make up more than 5 percent of the budget, the pace and motivation of sales needs to be investigated.

DOES THE CITY HAVE A GUARANTEED STREAM OF REVENUES?

In Romania, the historical lack of distinction between state and municipal property prevented cities from using real property as collateral and hindered the development of a municipal capital market. According to the new Romanian Law on Local Public Finance (October 1998), local governments are guaranteed a large portion of the wage tax. This means that borrowers will be able to collateralize the revenue stream from the wage tax until the Law on Public Patrimony passes and clarifies title of municipal property.

The Russian system is based on revenue sharing among Federal, local, and regional governments. None of the local tax shares are fixed on a long-term basis—e.g., a share can be changed once a year. For some taxes, however, local governments consistently receive a share that falls within a certain range—usually 75 to 90 percent of personal income tax collected in the municipal territory. The remaining taxes go to the regional and sometimes the Federal levels. If the share of income tax retained by a local government holds steady for several years, then a bank may consider it a source for collateral, even though it is not guaranteed by law.[20]

OPERATING SURPLUS

DOES A CITY HAVE AN OPERATING SURPLUS, THAT IS, ENOUGH REGULAR, RECURRING REVENUES TO COVER ITS OPERATING EXPENDITURES AND STILL HAVE MONEY THAT COULD BE USED FOR DEBT SERVICE?

Banks are not in the business of buying and selling property. When a bank offers a city a loan, it is really interested in the city paying back the loan, not in obtaining the collateral pledged under the loan. This means that the critical question for the bank is whether the city has an operating surplus. An operating surplus is the difference between a city's recurring revenues and its operating expenditures. A city with an

[20] Russian local governments also receive a portion of the VAT, enterprise profit tax, and the land and property taxes. In the case of land and property taxes, the share received by the local government is decided by the regional government, so there is considerable variation throughout the country.

operating surplus has met the requirements of its operating expenditures and can use the remaining funds for investment or paying debt service on a loan.

WHAT IS THE CITY'S POTENTIAL FOR GENERATING REVENUES?

As local Russian governments wean themselves from regional government support, they must devise strategies for generating revenues from their own sources. Many cities will try to obtain loans or bonds to finance improvements in critical services such as water, transport, health, education, and housing. The underwriter of the bond or the bank making the loan will analyze the city's ability to pay back the money, and this is directly linked to its ability to generate its own revenues.

In the United States, the subfederal levels of government have taxing authority except for rights that they have transferred to the Federal government. The real estate tax is imposed individually by local governments, although in recent years some states have created ceilings for these tax rates. In most Eastern European countries the situation is different because the national government holds most of the taxing authority. However, in many cases local governments have some flexibility in setting rates or have the rights to all revenues from a particular tax. For example, in Hungary, individual cities can set the property tax rate.[21] In the Czech Republic, municipalities retain 100 percent of the real estate tax collected from their territory.[22]

These are examples of local governments enjoying some authority and reliability in terms of obtaining revenues. Although a central government can promise cities a portion of a national tax or other revenues, it is always critical for a city to control its own revenues. When the central governments of Hungary and Slovakia faced deficits of their own, they drastically reduced the local governments' share of joint revenues and drove many into crisis.[23] Cities and their lenders, thus, must always analyze the city's authority in imposing taxes and fees, and the reliability of its revenues. This is why land and real estate revenues are important: in most countries they are reliable and also offer local governments the most flexibility in setting rates.

In the Russian cities surveyed, the main municipal revenues were revenues from sales, land, property taxes, and lease payments. Of these, only revenues from taxes and leases are recurring revenues. Together, these recurring revenues represent 10 to 28 percent of the municipal budget in the cities surveyed (Indicators D4120b and D4130b). In all cases, cities received more revenues from taxes than from leases.

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[21] Pigey, Juliana. "Draft Proposal for Future Steps on the Property Tax." 1998. The Urban Institute, Washington, D.C.

[22] "Local Governments in the Czech Republic," by Zdenka Matouskova, in an Urban Institute report, November 1998.

[23] Belcher, Cionga, et al.

Usual sources of revenue derived from land and real estate:

- commercial land and property tax,
- residential land and property tax,
- developer/building fees,
- leasing (or concession) of real estate by the city, and
- tax on income from real estate rentals, and sales of property and land (these sales produce capital revenue, not recurring revenue)

Russia today does not have a well-developed land and real estate market so it is difficult for cities to gauge the value of any particular property. As stipulated by Federal law, land tax is charged per hectare, with varying rates based on location and population. Under the current law, land and real property taxes are collected by the local branch of the Federal tax inspection. Local governments are not able to define tax rates and method of collection.[24]

Although the tax rates and method of collection for the land tax are stipulated by Federal law, local governments have some flexibility in defining economic areas under which different tax rates apply. Market price information can be used to assess which areas of the city have the most valuable land (particularly for commercial purposes) and can be taxed at a higher rate per hectare, which would simulate the effect of an ad valorem tax.

Besides land taxes, taxes on real property in Russia are assessed by and mainly assigned to local governments. Property owned by legal entities is taxed according to book value, which may or may not correspond to its market value. While an owner has the right to invite an independent appraiser to submit an estimated market value of the property, it is unlikely that the owner would do this unless it would result in a downgrading of its value. Property owned publicly is taxed according to its BTI (Bureau of Technical Inventory) value. Since this value does not change even with the sale of the property, it is unlikely that it reflects market value.

Eastern European countries such as Hungary, Poland, Czech Republic and Romania have not yet instituted an *ad valorem* property tax system. However, they have systems like Russia's land tax that approximate an ad valorem tax. For example, in Hungary, local governments charge property tax based on surface area and location, and can charge different rates for residential and commercial property.[25] As a transitional step to an ad valorem system, Russian cities may want to charge a property tax that is based on both surface area and location instead of an accounting value.

[24] O'Leary, Sheila and Olga Kaganova, "Real Property and Land Legislation in the Russian Federation." 1997. In *Real Estate Issues*, vol. 22, Number Two.

[25] Pigey.

ANALYZING THE COLLECTION OF REVENUES FROM PROPERTY TAX UNDER THE CURRENT SYSTEM

Even with only six cities surveyed, the share of the city budget coming from real estate taxes (Indicator D4110b) varies considerably—from 7 to 20 percent. The cities in which real estate taxes contribute least to the municipal budget, Pskov and Samara, should investigate the reasons. This will lead them to compare the exact amount collected. Samara collects the smallest amount of property taxes—153,340 rubles per capita (Indicator D2120g), and Pskov collects the second smallest amount—171,640 rubles per capita. While 100 percent of what Samara collects remains in the municipal budget, only 51 percent of Pskov's property tax collections from enterprises remains in the municipal budget. (See table 1.)

To take the investigation one step further, let's look at the tax base. Pskov has the second highest number of enterprise property taxpayers, 22 per thousand population (Indicator D2122a), and Samara has the third highest number of enterprises property taxpayers,17 per thousand population. The indicators, thus, suggest that these two cities re-evaluate the properties owned by the enterprises, since this is one of the principal reasons why they are collecting less revenue than other cities. If the properties are appropriately valued, then another factor to consider is the collection rate.

Another indicator of the tax base is the share of commercial stock that is in private ownership. St. Petersburg has approximately 25 percent of its commercial stock in private ownership, which is relatively high for Russia.[26] The high share of private ownership in St. Petersburg corresponds with the high share of the budget stemming from land and property taxes, more than 19 percent. (The reader should be aware that Indicator B4120a is the share of commercial stock in private ownership as a percent of all documented commercial stock. In the case of St. Petersburg, much of the commercial stock is not documented. What is documented is in private ownership, which explains the strange figure of 96 percent for Indicator B4120a).

[26] Kaganova, Olga. "The Investment Climate for Real Estate and Construction in St. Petersburg and the City's Income from Nonresidential Real Estate." 1997. The Urban Institute, Washington, D.C.

Table 1	St. Peters-burg	Pskov	Samara	Vologda	Ryazan	Taganrog
Enterprises paying property tax (per thousand population)	23	22	17	13	13	11
Share of commercial stock in private ownership (percent of all documented commercial stock)	96%	n/d	13%	n/d	16%	n/d
Revenues from enterprises paying property tax (rubles per capita)	379,837	168,296	149,801	295,183	246,899	193,049
Percent of enterprise property tax receipts remaining in city budget	100%	51%	100%	68%	100%	63%

WHAT ARE A CITY'S POTENTIAL REVENUES FROM AN AD VALOREM REAL ESTATE TAX?

In countries with well-developed land and real estate markets, land and property taxes are charged with regard to their value (*ad valorem*), and the collection of these taxes constitutes much of local government revenues. At some point in the future, local Russian governments may have more flexibility in setting land and property tax rates and may institute an *ad valorem* tax. The most important indicator in estimating the tax base under an *ad valorem* system is the market price of residential and commercial real estate. The market price information in table B3 (in the appendix) was collected directly from realtors. Since this information is critical for establishing an *ad valorem* tax, a city should collect this information from realtors as well as from registered sales. In countries with well-developed land and real estate markets, information gained from ongoing transactions helps update the local government's property value records. In the future, Russian cities will want to take the initiative to document and continually revise the market value of real estate so that it can be taxed accordingly. The value can be revised not only as a result of its sale, but with the sale of comparable real estate in a similar location.

ESTIMATING LAND TAX REVENUES UNDER AN AD VALOREM SYSTEM

The first step in estimating potential revenues from an *ad valorem* land tax is to have a documented tax base, i.e., plots that can be taxed. The second critical step is knowing that the value of the land that will vary from city to city, as well as within a city. Below is a rough estimate of what Ryazan might collect based on an *ad valorem* land

tax. As shown in table 2, even under the current land tax system, revenues vary from city to city based on the assessed value of the land. Ryazan collects nearly as much land tax revenues from the public as Taganrog, even though its percentage of privately owned land is much smaller.

Ryazan municipal territory = 22,372 hectares

Tax base = Land in private ownership (196 hectares) +

Land with use rights without time limits (476 hectares) +

Land, with lifetime use of (13 hectares) = 685 hectares

Average value of land plot = $17 per square meter (or $170,000 per hectare)

Estimated value of land in tax base = $116,450,000

Estimated total revenue from land tax with 0. 5 percent tax rate = $582,250

This number is much smaller than what Ryazan actually collected in land taxes in 1997. Under the current system, Ryazan collected roughly $3.9 million (at an exchange rate of 6,020 rubles = $1) from public and legal entities in 1997. This discrepancy can be explained by the very small tax base used here, because only 14 percent of land area in Ryazan is documented. Of the 14 percent of land in Ryazan that is documented, 22 percent is taxable because it falls under the categories “land in private ownership,” “land with use rights without time limits,” or “land with lifetime use.” Now, assuming the same ratio for all Ryazan land, (22 percent of all land in Ryazan is taxable) then the estimated revenues from an *ad valorem* system would be slightly higher than under the current system, at $4.2 million (with a taxation rate of 0.5 percent).

Table 2	Taganrog	Samara	St. Petersburg	Ryazan	Pskov	Vologda
Land area in private ownership, natural persons (% of total city area)	17.49%	2.10%	0.98%	0.49%	0.15%	n/d
Taxes received on land from natural persons (rubles per capita)	3,119	668	n/d	2,952	1,195	1,384
Market price of a land plot (US$ per square meter)	$5–25	n/d	$16–60	$10–25	$3	n/d

WHAT ARE THE CITY'S CURRENT AND POTENTIAL REVENUES FROM LEASING LAND?

As part of a long-term economic strategy, a city determines which mixture of private/public use or public leasing is the best for revenue generation, economic development, and serving the needs of its citizens. The mix will differ for residential and commercial zones. In determining how much real estate it needs to own, a city should consider what commercial properties it can realistically develop itself and which ones should be leased or sold to developers who will agree to improve the property.

Clearly, Russia is in transition with regards to which land tenure mixture will satisfy the needs of economic development, revenue generation, and the needs of its citizens. Like the cities in the Czech Republic, they may want to formulate a long-term sell-off strategy, but implement it gradually. With the development of a better cadastral system and eventual changes in national policy on land and real estate taxation, a city can expect to obtain more revenues from land and property taxes in the future. In the interim, a city will want to increase its revenues from leasing of municipally owned real estate.

CURRENT AND POTENTIAL REVENUES FROM LEASING LAND

Of the six cities surveyed, Samara received the least money from leases, 19 thousand rubles per capita and St. Petersburg received the most, 198 thousand rubles per capita (Indicator D4130a). These absolute amounts are also reflected in lease receipts as a share of the municipal budget. In Samara, leases bring the lowest share to the budget 1 percent, while in St. Petersburg leases bring in 9 percent. Judging from the sample of six cities, however, it is St. Petersburg that stands out while Samara is closer to the norm. (See table 3.)

Looking deeper, it becomes clear why leases in Samara contribute so little to the municipal budget. Rental payments for publicly owned land (Indicator D3110b) are the lowest for Samara at 19 thousand rubles per hectare, and highest for Ryazan at 13 million rubles per hectare. Rental payments for commercial stock (D3130b) are also the lowest in Samara at 46 thousand rubles per square meter, but in this category Samara is not that much lower than the other cities.

Table 3	St. Petersburg	Taganrog	Ryazan	Pskov	Vologda	Samara
Lease payments for land and commercial property and fines (as percent of city budget)	9. 3	3. 2	3. 2	2. 7	2. 2	1. 1
Lease payments for land and commercial property and fines (rubles per capita)	179,780	30,062	46,279	40,388	41,726	19,339
Rental payments for land (rubles per hectare)	n/d	2,789,525	13,026,963	7,455,103	12,193,910	19,379

Rental payments for commercial property (rubles per square meter)	n/d	70,488	47,873	66,901	97,542	46,422

WHAT OTHER OPTIONS DOES THE CITY HAVE IN RAISING REVENUES FROM LAND AND OTHER REAL ESTATE?

In addition to looking at a city's current situation, a bank will look at a city's record of raising additional revenues by new taxes or fees or the enhancement of current ones. At the moment local governments in Russia only have the option of introducing 23 taxes, for example, on advertising, dogs, land, personal property tax and some other. However, the share of local taxes in all local tax does not usually exceed 20 percent. revenues In this way, Russian cities are similar to cities elsewhere in Eastern Europe that have little flexibility in obtaining revenues through new taxes. In the Czech Republic, cities can impose entrance fees and fees on dogs, on bed charges and stays at spa and recreational facilities, on use of public space, on the right to drive in certain (downtown) sections of the city, and on slot machines. [27]

When a city has the option to implement new revenue schemes or increase rates on existing schemes, a city should optimize total revenues, which does not necessarily mean imposing the highest rate. For example, high permit and infrastructure connection fees will discourage developers to invest in the city. By tracking the level of construction activity (Indicators in table 2b in the appendix), a city can estimate how much money it is likely to gain by raising construction permit fees and developer fees. If construction activity falls, the city should reevaluate this method.

With all taxes, cities must be careful not to set a rate so high that citizens and enterprises will have a great incentive to avoid the tax. A good example of this is taxing rental income received by landlords. Note that this tax is particularly sensitive to the rule that the higher the rate, the greater avoidance, because it is relatively easy for landlords to conceal this income. Encouraging tenants to register leases and coordination between the leasing office and the tax collection office is necessary so that the latter is alerted to the existence of rental income. While rental income is theoretically taxed in Russia, it will take time for Russian cities to collect the necessary information to make assessment of this tax feasible. For this study, St. Petersburg could not provide any information on land subleases. None of the six cities surveyed could provide information on the value of land subleases, either from privately owned (Indicator V1200v) or publicly owned land (V1300v).

WHAT IS A CITY'S POTENTIAL REVENUES FROM TAXING REAL ESTATE TRANSFERS?

The taxation of real estate transfers is another example of tax avoidance. Table 1-4 shows that in all cities a substantial portion of housing unit transfers is not sales.

[27] Matouskova.

Instead, people characterize the transfer as an exchange or as a gift in order to avoid the tax. Another way people avoid the tax is to have a declared sales prices much lower than the price actually paid.

Table 4	Vologda	Pskov	St. Petersburg	Samara	Ryazan	Taganrog
Tranfer of housing units (per thousand population)	19.4	18.8	16.7	14.2	10.4	n/d
Sales (as percent of all housing unit transfers)	43%	51%	65%	68%	69%	n/d
Exchanges (as percent of all housing unit transfers)	6%	19%	7%	23%	16%	n/d
Gifts (as percent of all housing unit transfers)	24%	6%	7%	9%	15%	n/d

ESTIMATING REVENUES TAX ON REAL ESTATE TRANSFERS

To estimate potential revenues from taxing real estate transfers, a city will need to know the number of sales and other transfers. For example, in the city of Samara, transfer of housing units was 14.2 per thousand population, more than two-thirds from sales (Indicators V1500a and V1510a). Next, the value of the units transferred must be calculated. None of the cities was able to estimate the reported value of the housing units transferred or sold. However, a rough estimate for Samara is given below.

The average market price of a three-room apartment in Samara is from $600 to $750 US dollars per square meter. Assuming an apartment size of 60 square meters, this would mean a price range of $30,000-$45,000. If Samara charged a sales tax of 0.5 percent on the sale of a housing unit, this would generate roughly $150 to $225 of revenues per sale. There were 12,137 housing units sold in Samara in 1997, which means a potential revenue collection of approximately $2.3 million. If the city of Samara was able to tax all the housing units transferred, not just those that were officially sold, it would have a potential revenue collection of approximately $3.4 million. This would be equal to approximately 1 percent of the city's revenues for 1997 ($374 million).

ARE THE CITY'S OPERATING EXPENDITURES GROWING OUT OF CONTROL?

Operating expenditures are expenditures required to keep the city running and to continue to provide its citizens with basic services such as health, education, and transport. Because banks are interested in whether a city will continue to have an operating surplus, it is interested in growth of municipal expenditures as well as

revenues. If growth in operating expenditures outstrips growth in revenues, then the city's operating surplus will become an operating deficit and the city will face the difficult choice of defaulting on a loan or cutting critical services. To prevent this, a city should project how its expenditures will likely grow and put policies in place to prevent them from growing faster than its revenues are growing. Such policies would help convince a bank that a city is taking its obligations seriously and is preparing itself to pay debt service throughout the life of the loan.

ECONOMIC DEVELOPMENT

A well operating real estate market has the potential to generate much of a city's revenues directly; it will also increase the city's revenues indirectly by promoting economic development. The city has to balance direct revenues received from the real estate market (such as construction permits, developer fees, and sales tax on transfers) with indirect revenues such as corporate income tax from new businesses. Setting fees too high for developers will discourage renovation and turnover of real estate and will reduce the revenues that could be gained by the city from this economic activity.

Like any other market, obstacles to transactions in the real estate market will impede the market's efficiency and its growth. These obstacles can be legal, bureaucratic, informational, or financial.

Russian cities have some flexibility in overcoming legal obstacles set by the Federal government. While cities can point to legal obstacles to private ownership of land, there are other cities which have moved torward granting private ownership of land. Taganrog and St. Petersburg have 18 percent and 5 percent respectively, of its total territory held in private ownership.

HOW CAN A CITY REDUCE OBSTACLES TO THE DEVELOPMENT OF ITS REAL ESTATE MARKETS?

The indicators presented in the appendix capture bureaucratic, informational, and financial obstacles to the development of the real estate market. It is in a city's power, as well as in its interest, to reduce obstacles to development of its real estate market.

OBSTACLES TO DEVELOPING THE REAL ESTATE MARKET

Indicators in table G3a-1 (in the appendix) list the types of payments collected by the city from developers, and represent bureaucratic obstacles to development. A city should ease its workload, and reduce the informational and bureaucratic obstacles faced by developers by consolidating some fees and having one office collect all fees.

Indicators in tables G5a,b,v and g on typical payments collected from developers represent financial obstacles. The typical payments collected from builders as a percent of all construction costs for a multi-family building in the city center ranges from 10 to 20 percent in Vologda to 44 percent in Samara, and 29 to 49 percent in Ryazan. Of the cities surveyed, only Ryazan could estimate the typical total payments for a mixed office-retail building. If the city cannot estimate this amount, it will be difficult for a developer to estimate how much it will have to pay. Thus, this is an informational as well as a financial obstacle.

The Indicators in table G1b on the methods used to allocate land lots represent further informational and bureaucratic obstacles to the development of the real estate market. The cities of Samara and Pskov could not provide information on lots that were allocated. The cities of Vologda and Taganrog allocated all land by individual dealings. Only St. Petersburg and Ryazan used other methods for allocating land. The overwhelming reliance on individual dealings indicates an undeveloped market that lacks transparency. The purpose of a market is to determine the value of goods and to bring buyers and sellers together; but by relying on individual dealings, cities do not allow the market to determine the value of the land. A reliance on individual dealings as opposed to public auctions reduces the level of information about land; less information translates into increased risk, which means that buyers will be less willing to invest. On the other hand, holding public auctions or other open forms of allocation will introduce transparency in the system, which will encourage investors.

HOW WELL DEVELOPED IS A CITY'S LAND AND REAL ESTATE MARKET?

A city (as well as developers and foreign investors) can evaluate the stage of development of its land and real estate markets by using the indicators in the appendix to this report. For example, the Indicator B1110a, sites of documented private ownership, is important because of its influence on the potential volume of transactions. Another indicator that can gauge market development is D6200, the percent of rental rates on municipally owned buildings based on market value. Most cities surveyed still rely on a formula and none rely on the property's market value or competitive bids. The reliance on formulas may be from a lack of information on true market value of properties and also a concern that a competitive bidding process may fail if there are too few bidders or if the bidders collude in determining the price they are willing to pay for the property.

MARKET ACTIVITY

With the indicators from table V1A on land and real estate transfers on the secondary market, a city can compare how active its real estate market is in relation to other cities. Generally, a large number of transfers indicates a more developed market with fewer obstacles created by the local government. In the cities surveyed, the number of housing unit transfers per thousand population was highest in Vologda (19 per thousand population). However, the highest number of offical sales (as opposed to exchanges or gifts) was in St. Petersburg (11 per thousand population). Compared to the market for residential units, the markets for commercial units and for land are much less active. The sale of commercial buildings and premises ranged from 0.223 per thousand population in Samara to 0.841 in Vologda. St. Petersburg and Taganrog did not report figures. Land sales ranged from 0.004 per thousand population in Ryazan to 0.055 in Samara.

In the sample of six cities surveyed, the market price of a three-room apartment varied from $287 per square meter in Pskov to $750 in Samara. The annual market rent for a standard office also varies considerably—from as low as $96 per square meter in Ryazan to $400 in St. Petersburg. In the case of St. Petersburg's high office prices, the price reflects the high desirability of the premises, particularly the location in a major city. In analyzing price information, however, a city should understand that higher prices often reflect an undeveloped market. With few apartments available for sale, demand will overwhelm supply and drive up the price. In a better developed market more people would consider selling their apartment and prices would probably stabilize at a lower level. The transition to a better developed market means that a city gets less money per apartment in sales tax, but more money in total as the number of transactions increases.

Table 1-5 Market Value (Price and Rent) of Real Estate in the Six Cities Surveyed	Minimum value	Median value	Maximum value
Market price of 3-room apartment (US$ per sq. m.)	287	460	750
Annual market rent of standard office (US$ per sq. m.)	96	250	400

FINANCIAL MANAGEMENT: PAST PERFORMANCE IN PAYING BACK OBLIGATIONS

Good financial management means more than paying back financial obligations, but failing to pay back an obligation will surely characterize the city as having bad financial management. A bad record in paying back obligations will overshadow a city's attempt to prove that it has the ability to pay back a loan or bond. Not only will default affect its own future financing possibilities, but a default by one city will have a negative impact on

financing for all other cities in the country. Since the financial and political crisis of August 1998, several seemingly strong local Russian governments have defaulted on bonds. Investors will not soon forget this, but may not hold the local governments entirely at fault because of their legal obligation to invest part of their loan proceeds in the GKO (short-term treasury bills of the Russian government). Regional governments defaulted on "agricultural" bonds even before the August 1998 crisis. Many of the regional governments believed that the responsibility of the "agricultural" obligations should fall on the shoulders of the Federal government. When some regional governments refused to pay agrobonds, it began a domino effect in which other regional governments were encouraged also to default.[28] For whatever reason, once a government has defaulted on a loan or bond, it will have to convince future lenders that it has improved its financial management and is committed to building a reputation as a reliable borrower. Land and real estate indicators are just one tool available to city government officials to monitor and improve the city's financial management.

[28] "Current Review of Russian Subfederal Bond Market," prepared by Maria Garadja and Alexei Novikov (EA-Ratings, the affiliate of Standard & Poors in Russia), November 5, 1998.

PROJECT ROLLOUT

CONCEPTUAL FRAMEWORK FOR MONITORING OF LAND AND REAL ESTATE REFORM IN RUSSIAN CITIES

Nadezha B. Kosareva and Andrei V. Khakhalin

OVERVIEW OF ACHIEVEMENTS AND PROSPECTS

Since the beginning of the 1990s, legislation on privatization and the legal recognition of different ownership forms has been developing. This has initiated the formation of municipal real estate markets, which is gaining momentum despite a substantial number of unsettled legal issues, including the implementation of rights to private ownership of land. This process calls for the development of instruments for quantitative evaluation and analysis. Both federal authorities and local self-governments need these. They are needed to monitor the course of reforms and to assist real estate market operators, such as realtors, developers, and investors, in the process of making informed decisions. Attracting foreign investment into land and real estate also depends on the availability of detailed, reliable, and current information on this sector of the economy. This information needs to be compiled in accordance with the internationally accepted standards for such data.

The goal is the creation of modern informational media that will support the formation of a real estate market. This requires a specific class of statistics not currently available. As is known, state statistics are structured to service an economy managed through a system of centralized planning. They are insufficient for this type of analysis. Municipal real estate statistics are needed.

An example of the inability of state statistics to adequately reflect the processes taking place in the cities and provide informational support for municipal development is persistent discrepancies between the data on completed construction and renovation projects presented by statistical and architectural authorities. This is because the State Architectural and Construction Inspection receives data from official acceptance acts, while statistics agencies collect data from reports submitted by enterprises, institutions, and natural persons. The effective regulations do not require verification of this data, and thus the actual picture is often distorted. At the same time, the discrepancies may also appear because of incompleteness of the information on individual housing construction typically available to the statistic authorities.

The system of economic statistical indicators developed by the project attempts to fill this gap and create a prototype of municipal economic statistics. The proposed set of indicators may be successfully used in sample surveys and comparative analysis of reform progress in selected regions and municipalities. Additionally, some indicators may merit inclusion in the national-level statistical system.

Some of the proposed indicators will be useful in the process of introducing the state registration of real estate rights and transactions that started in 1998. It may also benefit the ongoing efforts of the cities to create real estate informational systems (REISs).

It is worth considering the questions: If the theoretical potential of REISs is much higher than that of the proposed indicators, is the introduction of these indicators an unnecessary step? Should concentration be directed on REISs from the very beginning?

In our opinion, it should not. While the concept of REISs is much broader than the proposed indicators, the development of REISs faces serious problems, some of which are also characteristic of the indicators system. Therefore, the process of introducing the indicators into practice will test some of the solutions that may later be used when installing REISs. In addition, REISs are more expensive. This could increase implementation time due to the additional financial requirements, and the land and real estate reforms need immediate monitoring. Finally, all attempts to install REIS have been unsuccessful. Even if in the foreseeable future such systems do appear in separate cities, this will not be enough for broad comparisons across the cities. On the other hand, the indicators system creates standardized information that allows such comparisons quickly and at incomparably lower cost.

In order to be adequate for the solution of the large-scale problems identified above, the proposed indicators set may require modification. On one hand, it may be useful to add indicators characterizing the general state of a city's economy and various components defining the local investment climate. On the other hand, several sections of the proposed system are too fragmental to provide an objective view of the situation. The latter concerns, for example, breakdown of the data on the private ownership of nonresidential properties into administrative, trade, service, industrial uses, hotels, etc. In practice, there is not a single city bureau of technical inventory that collects data on nonresidential premises in such detail.

Since its inception, the discussed indicators system has provided visible improvements to the process of data collection conditions in the cities. Of no less importance, the developed system needs to be flexible enough to handle future improvements. Finally, it is also important that the success of this project sets a precedent, as we are not aware of any other successful attempt to introduce such economic statistical indicators in Russia.

The most immediate result of the work performed by the cities and the invited consultants would be the utilization of the proposed indicators by the city administrations as a planning and monitoring tool. The main areas where the indicators will be especially useful are listed below:

- Strengthening of the local revenue base of the city budget.
- Development of land and real estate privatization strategy.
- Creation of economic development and investment attraction programs.
- Improvement of the management of municipal properties (land and nonresidential stock).

The viability of the proposed indicators and the entire system of their collection and maintenance depend on whether "system-forming" agencies of local administrations find these indicators useful for systematic application. It seems that city agencies such as the administration and finance committee, the economic development committee, the municipal property, the land committee, and some others will find these indicators most useful.

Of key importance in this process is the degree to which this new decision-assisting tool is accepted by the leaders of these agencies, the administration officials supervising respective activities (this is often the deputy head of administration for the economy), and, of course, the head of the city administration. Also evident is that the data collection procedure should be given official status, i.e., approval by resolution of

the head of the city administration that identifies responsible officials, reporting dates, and the final data collecting agency.

NEXT STEPS

From the above, it follows that the next steps in developing monitoring of land and real estate reform in Russian cities may be:

1. A broad discussion of the results of the first year with the project participants, other interested cities, officials of responsible federal authorities (State Committee on Architecture and Construction, State Statistics Committee, and others), and mass media covering the event. Such a discussion may resolve the questions concerning the transition of the interested cities to a systematic (annual) collection of indicators. It may also lead to creation of a working group at the federal or interregional level to develop the conceptual framework for municipal statistics to be created and maintained by the Russian cities. Another important instrument of informing and enlisting new advocates of the developed indicators will be dissemination of the results of the first implementation year among as many city administrations as possible.

2. Developing a manual for municipal administrations. The manual would describe methods of economic and statistical analysis of the status and trends of the real estate market, using an adjusted set of indicators. These methods would include calculations, analysis, and comparison to other cities. In other words, it is necessary to show how to make calculations, giving concrete formulas with explanation of their economic meaning. Also, explain how the calculated ratios may be translated into property management decisions.

3. Identification of the organization responsible for updating the database on an annual basis and providing methodological assistance during the transition phase. One possible solution may be a nonprofit NGO (as is the case in many market economies). Because of the complexity of the problem and the need for coordinating the activities of the cities, and government and nongovernment sponsors of the project, the decision may be crucial for the project's viability during transition.[29]

4. Achieving the maximum financial sustainability of the project. A usable tool to achieve this goal may be the preparation and dissemination on a commercial basis of an annual reference guide for realtors, appraisers, and both Russian and foreign investors. Dissemination may be organized with the support of the Russian Realtors Guild, appraiser societies, similar entities in North America and Europe, as well as interested investors.

The first section of the guide could contain annual indicators for the entire period of their collection for both the pilot cities and new participants in the project. This section could be supplemented by analytical reports. The second section could contain

[29] The efficiency and professionalism of the “system operator” should be regarded as a factor comparable in importance to the willingness of the cities to continue the project. From this viewpoint, having the Institute for Urban Economics play the function of such an “operator,” as it did during the first year, would be very important.

extensive description of the proposed investment projects in separate cities, supported by the administrations, advertisements, as well as mayors' invitations to investors and other documents and materials characterizing the investment climate in these cities. The vice-mayor of Chelyabinsk during implementation of the pilot project in the city in 1996 proposed the idea of such a publication. This part of the guide could also be supplied with rating indicators of the investment attractiveness of the cities that want to have such ratings established and published.

Another, purely utilitarian, part of the guide could be devoted to the analysis of particular segments of the land and real estate market in separate cities. This could include analysis of sales and prices for land plots and real properties. Commercial offers of realtors and developers of the cities referenced in the guide could also be included here.

CONCLUSION

In conclusion, the development of the land and real estate market and the associated investment activities in this sector are far ahead of the development of the informational support of these processes. Without quantitative records of changes, neither timely regulation by the federal and local authorities, nor adequate response of the private sector of the economy is possible. Therefore, any attempt to bridge this gap, including the present project of organizing municipal monitoring of land and real estate, merits priority attention and the full support of those concerned with the economic development of Russian cities.

Michael P. Berezin and Oleg V. Matyukhin

As field workers under the project, we were responsible for compiling the data coming in from St. Petersburg, Samara, Pskov, and Vologda for analysis. In the process of work, we faced many difficulties that taught us a few lessons that may be useful in the introduction of real estate monitoring procedures in Russia's cities.

ACCESS TO DATA AND EXPEDIENT ACQUISITION OF DATA:

Russian municipalities do not yet have enough experience in disclosing information on their activities in accordance with standards used in the countries with a developed democracy. Access to municipal data can be problematic. Despite the fact that most cities have their own statistical agencies, these agencies are not capable of furnishing the data of the city's operations within the real estate sector (the number of concluded contracts, issued permits and dismissals, incurred costs and derived income, etc.). As a rule, municipal statistics are reduced to a minimum of data on the city's social and economic status that is thus, not instrumental for an in-depth analysis. For example, cities do not usually disclose the information about privately owned garden plots and dachas that is essential for assessing residents' welfare, real estate, and housing markets behavior. As a rule, data on household taxable incomes (other incomes could not be traced) or the level of satisfied consumer demand for housing are averaged and not differentiated, whereas such "details" as data on nonresidential premises in residential buildings are broad and indefinite and thus allow rather ambiguous interpretations.

Although the central government and local authorities by 1998 had come to a compromise in the distribution of their responsibilities in the sector concerned, they had not yet reviewed their reporting patterns. Thus, a full picture had to be put together on a limited basis using published statistics and the available fragments of inner reports that did not allow us to produce a comprehensive view of the current status of the sector. For example, none of the cities we worked with was able to provide the complete data on their nonresidential property. Some of them were not aware of how much property was in private ownership, and others were not aware of how much of it was publicly owned (controlled by Oblast authorities), or what portion of nonresidential property was municipally owned, or what was involved in completed transactions. In certain cities, some of the agencies that are authorized to register land parcels failed to answer the simple question of how many plots they had registered at the end of the previous year.

It was evident that, to provide the information requested by the project, the municipal staff (25 to 30 employees) in each city had to complete a variety of actions, sometimes rather cumbersome and tedious. It was necessary to spend many hours and days in search of the initial documents; then make the necessary excerpts and calculations, rather than just looking in the city's official statistical papers; and then insert figures in a chart.

The routine activities of municipal staffs do not include collecting and maintaining data; therefore, they did this for the project because of orders issued by senior officials.

The staffs have a certain order of priority, depending on the level of an order issuer. The senior officials who controlled the work of municipal departments and offices were often guided by private or "casual" motives rather than by business interests. Therefore, an order issued by a city mayor might help in the efficient coordination of efforts by various municipal bodies or city officials.

However, when data are collected at the municipal level, as in our case, it appears essential to take into account that some real estate data are maintained exclusively at the Oblast level (e.g., on property owned by Oblast authorities and transactions closed by them), and sometimes even the mayors are not able to help in obtaining data of this nature.

That is why it is highly recommended to obtain the consent of top city and Oblast officials to support any efforts on the indicators survey. This will be easier to accomplish when one has "relevant letters" from at least two RF Ministries (one from the Federal Land Committee and one from the Ministry of Construction). This will speed up the process of data collection by a month and a half (sometimes two months), rather than the 1998 case where (even with the support of a deputy mayor) it took more than four months to collect only 80 pecent of the data required for the project.

RELIABILITY OF DATA

In making requests for information from all data suppliers, we consider it necessary to introduce some modifications to them.

In all instances when data on publicly owned property was required, it appeared logical to break it down into separate columns for municipal, subfederal, and federal property so that all forms of publicly owned property are covered by the chart. This will allow the tracing of the limits of city administrative control over the property located on its territory.

Perhaps, for chart B4 showing the volume of nonresidential property, it would be better to design two separate indicators: one for detached nonresidential buildings and one for built-in premises. In doing so, one should bear in mind that the chances of obtaining data on the aggregate floor space of built-in premises are by far greater than finding out the number of them, since it depends on what specific units will be used for estimates (a mail address of property, or a document certifying user's rights). That is why it appears necessary either to define more precisely what a built-in unit means or to restrict estimates to the data on aggregate floor space.

On chart V1, which shows the rate of transactions on the secondary market, it would make sense to indicate more precisely that the data on land sales should disclose only the number of registered sales transactions, inasmuch as in the cities of such transactions, most are simple land purchases by gardeners whose purchase contracts are certified by a notary.[30] It is quite evident that city administrations are not aware of the number of such transactions.

[30] That is additional evidence that in the absence of a law on registration of real estate transactions it is hardly possible to have complete information about the volume of transactions closed on the secondary market. It is expected that in 1998, upon enforcement of the law (as of 02/01/98), the situation will change for the better, since it will become clear to individuals that unregistered transactions will be deemed null and void. [Ed.]

In chart V3, which shows base free-market real estate prices, it would be better to indicate more precisely what particular components—VAT, selling commission, registration fee, etc.—are to be included. It should be noted that information for lines V3200–V3500 (covering all the types of transactions except purchase of apartments), even if provided, is considered unreliable in most cites because such transactions are very insignificant in number and extremely different in terms and volumes of payments actually made. It appears to be difficult to determine their average, due to the diversity of local real estate brokers' and appraisers' opinions.

Chart G5, "Rate of Standard Payments Charged from Developers," turned out to be the most cumbersome to fill in. Chart line G5100 showed the aggregate amount paid by a developer. In obtaining the true values, it would appear worthwhile to explain exactly what items should be included in the cost of construction (project design, resettlement of inhabitants, etc.). The St. Petersburg case proves that the distribution of costs by other numerous items of expenditures is rather conventional. Developers are required to pay the market price of the property acquired while others only pay a "compensation" to the municipality for infrastructure development and/or the difference between the rate of compensation and the market price of the property. In addition, there still is a group of developers that are ready to pay double the starting price set by municipal appraisers in order to acquire the property without competition. Moreover, some portion, or even all of the payments may be paid (in terms of square meters) to the municipality. Hence, itemized distribution of payments is just capable of demonstrating the general IQ level of the municipal bureaucracy or showing how much the effective regulations may be interpreted. It would be more valuable to find out how the city spends the money collected: how much does it spend on infrastructure development, residential construction, arrangement of tenders, and other needs?

In any event, it seems necessary to delete line G5140in chart G5, "In-kind Payments to City," where they are classified as an item of expenditures. This indicator may be treated twofold: a developer may cover either (1) a portion of the property cost or (2) a fee paid for general or out-of-site infrastructure development. It would be better to ask this question separately.

For line G5110 ("Aggregate Amount of Land-Related Payments"), a question should be raised regarding what is to be included with this indicator. For example, is it necessary to take into account the rental paid for land during the construction period?

In most cases, the charts did not provoke any questions; therefore, we believe that they may be used as a base for easy comprehension and execution.

PROPOSED CHANGES

We have already mentioned the necessity of obtaining top city officials' consent in order to make the process of data collection less tedious and time consuming. This will allow all future requests, even if they are in expanded format, to go through faster with fewer complications.

Our proposals are based on two principal assumptions:

First, real estate marketing analysis should be made within a more broad context of a general comparison of the cities' social and economic status. Apparently, the situation of the real estate market is determined not only by the level of local regulative framework but also by the progress achieved in other businesses. Justified profit

expectations of various market participants operating in the manufacturing, trading, and servicing areas give rise to a relevant demand for industrial, commercial, and residential property, thus determining the pace and rate of the market development of the real estate sector. Hence, it appears essential to give as far as possible a proper weight to cities' economic status while analyzing their distinctions in the real estate sector.

It is apparent today in Russia that most operating businesses stay out of the direct line of reporting and monitoring control. However, even with the data available, it is possible to evaluate the economic standing of the cities surveyed. This may be done through evaluation of:

- Annual overall production.
- Rate of capital investments.
- Volume of retail trade.
- Sector employment by types of business.
- Private and governmental sectors employment.
- Cost of consumer goods basket.
- Number of private cars.
- Number of individual summer cottages and gardens.
- Number of tourists coming from abroad.

Perhaps, the above stated as well as any other indicators help in disclosing the city economic structure and potential.

Our second assumption is that assessment of the real estate sector should be made through the analyses of four independent components. These components (they are described below) are quite evidently correlated with Questionnaire headings B–D. We are not going to modify it; we just propose to include some additional indicators into the already approved scheme.

1. Market turnover of real property involves both private and government-owned property and thus is closely related to the market infrastructure development and the level of transaction cost.

Serious investigation of this component requires introduction of at least some of the indicators listed below:

- Number of unit exchange transactions.
- Number of agent companies.
- Average commissions.
- Standard period of time necessary to close a residential/nonresidential property transaction.
- Number of instances when secondary market transactions were passed over to the court.

2. Real estate sector development is closely connected with the level of infrastructure development, procedures for issuing permits, rate the of charges paid by

developers, and the general status of the city economy (state of demand). For analyzing this component, it appears reasonable to add at least some of the following indicators:

- Aggregate area of undeveloped plots with already developed infrastructure.
- Annual rate of city investments in infrastructure development.
- Number of uncompleted projects at the end of year.
- Number of buildings with households already resettled at the end of year.
- Annual number of units allocated to households on waiting list.
- Average time period required for getting an approval of a submitted project.
- Availability of an approved zoning plan, and the percentage of urban area covered by it.
- Aggregate area of preservation zones.
- Number of appeals to courts and arbitration courts against municipal authorities' decisions, or the denials issuing construction permits.
- Number of appeals lodged by shareholders against developers/investors.
- Number of completed projects transferred to municipal balance sheet.

3. The level of property maintenance depends on the volume and sources of finance as well as on types of relations between owners, users, and service providers. This component was not included in the project.[31] It appears reasonable to use some additional indicators, such as the following:

- Annual budgetary expenditures on property maintenance.
- Extrabudgetary funds spent on property maintenance.
- Residents' coverage of maintenance costs (to the end of year).
- Number of households in arrears with rent (percent of rent due).
- Number of households in arrears with utility charges.
- Number of tenants renting municipal nonresidential property that are in arrears with rent (percent of rent due).
- Area and percentage of residential property maintained by private service provider.

4. Budget revenues are derived from real estate. The level of such revenues is determined by taxation, privatization, and lease policies enacted by municipal authorities. To make the comparison of cities more relevant, it appears reasonable to collect the following indicators:

- Maximum and minimum rates of land tax.
- Maximum and minimum rates of rent paid for the lease of municipal nonresidential property.

[31] It is a very significant omission in the project that should be cured in the future. Specifically, to trace the level of profit yielded by the city from nonresidential property, it is very important to know the level of its maintenance costs. [Ed.]

- Maximum and minimum land sales prices.
- Maximum and minimum nonresidential property sales prices.
- Number of leases with rent exemptions in municipal nonresidential property.
- Number of legal entities with preferential rent rates for municipal nonresidential property.

Evidently, for selecting additional indicators it is, first and foremost, essential to take into account instruments that are proposed to be used for the benefit of analysis. Then, it is important to gain the relevant databases (many of the indicators listed above may be found in the municipal press). Then the focus should be on those indicators that are of vital importance for municipalities in terms of necessity in promoting real estate sector development. In this context, of particular importance are such indicators as “city investments in infrastructure development,” “availability of an approved zoning plan,” and “percentage of residential property maintained by private service providers. ”

MUNICIPAL MONITORING OF LAND AND REAL ESTATE: LESSONS AND OUTCOMES

Andrei V. Khakhalin

Our task under this project was to provide consultative assistance in data acquisition for indicator monitoring programs to two cities—Ryazan and Taganrog. The cities needed to understand the meaning of indicators, summarize the collected data, to render information more precise and accurate, and to fill in the gaps. In 1996 a pilot indicators project was launched in Ryazan and Chelyabinsk. In 1998 Samara and Khabarovsk implemented a similar, but more limited program of land and real estate reform indicators. The lessons and outcomes of these two programs allowed us to identify regular trends and make a comparative analysis that appears instrumental in accomplishing similar projects in other cities and regions of Russia in the future.

First, it is important to understand that the proposed system of indicators allows us to trace the behavioral trends of the real estate market, including patterns in land use and their mutual relationship, as well as to present the sector management and regulation procedures in their integrity and unity. Subsequently, the indicators should, first and foremost, become a matter of prime concern for sectors and departments of municipalities, local authorities, and leaders who are authorized to identify the strategy of municipal economic development, to lay down the general policies and specific patterns of real property management, which implies control over investments and municipal budget revenues from real estate.

Hence, a municipal committee for the economy, or any committee designed to perform similar functions, should use indicators as tools for strategic planning and attracting investments. Other departments in city administration in charge of specific areas of the municipal real estate sector—e.g., a Land Committee, a Technical Inventory Bureau, an Architecture and Construction Committee, an Architecture and Construction Inspection, and a City Finance Department, should be the key sources of information for monitoring a city's land and real estate market. However, the project proves that municipal authorities at any level do not fully realize the significance and potential of the proposed indicators in their integrity. While collecting the data we heard from municipal personnel that "such forms of reports were unfamiliar for them and too complicated for comprehending."

To some extent, this attitude may be explained by the fact that on-site coordinators were provided only with separate charts rather than with a whole bundle of them. Since the charts were supposed to disclose only specific aspects of information they were passed on to relevant municipal departments, which staff was deprived of an opportunity to realize the end target of the indicators program, and, thus, perceived the task as another boring demand to submit one more report.

Even Taganrog (which in our opinion outperformed the other cities in data acquisition), a city with a very qualified project coordinator with a good grasp of the goals of economic reform, complained more than once of the difficulties of processing of data. The work appeared to be far more tedious than had been suspected, and required seri-

ous effort in order to persuade city departments and officers[32] to submit needed data in a timely manner.

Another problem was the low level of computerization in the cities' database, which made the project difficult and time consuming when information on nonresidential property sales on the secondary market, etc., had to be "extracted" from numerous ledgers and registers.

Moreover, fundamental data showing a department's general level of performance, were not available and had to be estimated on special request. For instance, Land Committees charged with registering land plots, met difficulties trying to produce figures showing the total number of documented land holdings by types of ownership, or length of leases. In most instances, Technical Inventory Bureaus personnel were not able to produce figures on the city's residential stock or how many privately and municipally operated units it had. In general, Russian cities meet severe difficulties when they try to fairly evaluate the situation on their secondary real estate markets.

Lack of coordination in efforts undertaken by various municipal detachments, along with structural reforms that don't always work should also be included in the list of key factors complicating the process of data acquisition. For example, in 1996 during implementation of a pilot project in Ryazan, the city had a powerful Land Committee that was subordinated to one unified Department with the City Vice-Mayor controlling the whole real estate sector. The Committee was capable to produce any required information on land. But by 1998 the most of the Committee's personnel had migrated to a newly established municipal unitary company "The Information and Cadastre Center" that collaborates with the municipality mainly on a contractual basis. This latter aspect appears the most serious obstacle for the Land Committee engage in data collecting for information in the Center's domain.

Obtaining information on infrastructure connection fees from privatized utility companies (water and heat) was particularly impossible once the data were removed from municipal control.

It is conclusion that the most essential factors making the system of indicators viable are the deep understanding and will of a municipal department to introduce and use this system on a regular basis. Of particular importance is the extent to which the department leader, the Deputy Head of City Administration (as a rule, Vice Mayor for the Economy), and the Head of the City Administration will adhere to this instrument.

Moreover, it is important to generate interest in the project among city leaders not for reasons of prestige, or to get a free-of-charge analysis and recommendations from outside experts, but through persuading them of the necessity of indicators monitoring and motivating them to do that by themselves. That may be illustrated by Ryazan's case, where the municipality's attitude toward the project experienced a certain evolution. First, the city refused to participate in the project, but when the administration familiarized itself with the outcomes of the 1996 pilot project (the administrative staff had been considerably renewed, and newcomers were not aware of the project results)[33], it not only agreed with the proposal, but even managed to implement the project on a

[32] The project experience shows that as a rule a city's effort to produce required information involved from 20 to 25 municipal officers working in land and real estate sectors.

[33] Ryazan administration had been considerably renewed, and newcomers were not aware of the project results.

rather high level. Also, when the required data were collected and refined, the city administration did not just stand idle waiting for summarized data on all the cities—project participants asked for a copy of filled-in charts for their own use.

Indicators' collection[34] should be done annually and should acquire an official status, i.e., it should be approved by the head of city administration through issuance of a resolution (ordinance) stating who, when, and where shall pass the required information and who will coordinate these activities. The success with which the Ryazan administration managed to arrange the process of data collection was to a great extent a result of the resolution issued by the City Vice Mayor, though the document still failed to provide for regular performance of such work.

Finally, there is the question of who will collect the data. It appears that the staff already working in indicators' data collection should be entrusted with the job. In 1996 there were two problems hindered the quality of the project results: (1) Manager assistants in charge of collecting data had not the slightest idea of what data they were required to collect; and (2) The charts were done by specialists—from say, the Committee for the Economy—who were actually aware of the situation (owing to their service rank) but data they provided were still nothing more than educated guesses.

It appears that data verification and refinement will remain very important stages inasmuch as more than once we found that, at various phases data referring to one indicator produced by the same agency were quite different (that is particularly true for Chart D, which disclosed municipal revenues from land and real estate). That may be explained by the variety of indicator interpretations. For this purpose, on-site project coordinators were invited to Moscow for a seminar at which they were instructed on how to interpret the indicators and how to acquire the data for them. But perhaps this information did not trickle down to persons charged with collecting the data. Therefore, it appears reasonable to accompany each chart with a note not only indicating what municipal agency should fill it in, but specifying procedures for data collection.

[34] Dynamics of land and real estate markets may be traced only in result of a longitudinal survey that will allow, in the long run, to define short and long-term perspectives and correct them when necessary.

APPENDIX
MONITORING INDICATORS